To: fmecham@co.slo.ca.us, bgibson@co.slo.ca.us, ahill@co.slo.ca.us, lcompton@co.slo.ca.us, darnold@co.slo.ca.us, cr_board_clerk@co.slo.ca.us, jcaruso@co.slo.ca.us, elcarroll@co.slo.ca.us, jhamm@co.slo.ca.us,
Cc:
Bcc:
Subject: SLO Co. Sewage Sludge Ordinance - Wrong / Cease EIR Process
From: David Broadwater <csi@thegrid.net> - Thursday 11/19/2015 11:00 AM

1 attachment

Wrong Ord. - BofS Directs - Stop EIR 12-18-15.pdf

SLO County Governmental Bodies;
Board of Supervisors, Planning Department & Environmental Coordinator,
Health Agency & Environmental Health Division,
Health Commission, Agricultural Commissioner, Agriculture Liaison Advisory Board, Water Resources Advisory Committee, Planning Commission.

re: Draft Sewage Sludge Land Application Ordinance - CEQA/EIR Review Initiated 11-2-15
Wrong Ordinance – Noncompliant with Board of Supervisors Directions
Cease CEQA-EIR Process / Submit Correct Ordinance for Review

On 11-2-15, the Planning Department issued an NOP regarding the preparation of an EIR on a draft permanent ordinance regulating/permitting sewage sludge land application on agricultural lands used for growing human food, animal feed and grazing livestock. On 11-3-15, the Central Services Department - Purchasing Division issued an RFP for consultants to submit bids for conducting the EIR with a deadline of 12-4-15. The Planning Department has opened a CEQA Public Scoping Period for submission of recommendations regarding issues to be analyzed in the EIR, which will close on 12-18-15.

This draft ordinance fails to conform with eight of the BofS directions to staff regarding constructing an ordinance permissive of sewage sludge land application.
These failures pertain to the central purpose of creating such an ordinance, not to peripheral or incidental matters. See the attached letter.
Years of work by two large, multidisciplinary task forces went into formulating recommendations for drafting an SLO County ordinance regulating sewage sludge land application. The BofS endorsed those recommendations and directed County staff to implement them.
The attached letter demonstrates in detail how this draft ordinance conflicts with BofS directions. The eight failures to comply which disqualify this draft

ordinance
for CEQA/EIR consideration are listed on the first page, followed by recommendations for rectification (ceasing the CEQA/EIR process, etc.) and some background
information. The rest of the 19-page letter contains detailed analyses of each of the eight non-compliant elements of the proposed draft ordinance, and the significance of each.

Please take the time to read the attached letter, and to consider taking the actions recommended. This is a matter that could entail long-term effects on SLO County's agricultural viability, environmental integrity and public health.

David Broadwater
Center for Sludge Information

CSI: Center for Sludge Information
Advocacy through Acquisition, Analysis and Articulation of Information re:
Land Application of Sewage Sludge
6604 Portola Rd., Atascadero, Calif. 93422. ph# (805) 466-0352. Email: csi@thegrid.net

to: SLO County Planning & Building Department and Environmental Division

re: Proposed Permanent Sewage Sludge Land Application Ordinance
- **Wrong Ordinance – Fails to Conform with Board of Supervisors Directions & Task Force Recommendations**
- **Cease CEQA-EIR Process / Submit Correct Ordinance for Review**

date: 11-19-15

On 11-2-15, the SLO Co. Planning Department issued a Notice of Preparation regarding the initiation of the CEQA/EIR process on a draft permanent ordinance regulating and permitting the land application of sewage sludge. It initiated a Scoping Period ending on 12-18-15 to allow organizations, agencies and the public to submit recommendations regarding issues to be analyzed in the EIR.

This draft ordinance fails to comply with numerous BofS directions regarding how to construct such an ordinance. These failures undermine the very foundation of the ordinance, which are central to all sewage sludge land application regulations:
- The levels of contaminants allowed in land applied sewage sludge,
- The levels of contaminants allowed to accumulate in soil, and
- The range of contaminants used to limit the levels of contaminants in both sewage sludge and soil.

These are the core matters that determine the short- and long-range impacts of this activity on public health, ecological integrity and agricultural viability.

Additionally, this draft ordinance fails to comply with other important BofS directions designed to ensure that:
- SLO County doesn't blindly forge ahead with land application as the preferred means of sewage sludge disposal without analyzing other methods of disposal or use,
- The public is notified of pending land application projects and provided the opportunity to comment on them,
- Landowners are informed of the potential dangers and benefits of land application, and provide informed consent prior to receiving the material on their property,
- County property records document the depositing of any sewage sludge to inform potential buyers and appraisers of that activity prior to sale,
- Those generating and applying sewage sludge post performance bonds and obtain pollution liability insurance to protect landowners from remediation and litigation costs.

These failures to follow BofS directions on formulating such an ordinance render this draft ordinance unqualified for submission to the CEQA/EIR process.

Although previous iterations of permanent ordinances have contained most of these deficiencies (about which CSI has repeatedly submitted comments), this is the first version to be subjected to the CEQA/EIR process.

RECOMMENDATIONS:

1. Cease the CEQA/EIR processing of this draft ordinance,
2. Draft an ordinance compliant with BofS directions, and
3. Initiate the CEQA/EIR process when such an ordinance is formulated.

CSI is fully prepared and willing to participate in a CEQA/EIR process on a permanent ordinance regulating and permitting sewage sludge land application, but is strongly opposed to subjecting this draft to that process due to its failures to qualify as an ordinance conforming with BofS directions.

Due to the costs the County will incur processing this deficient draft, in terms of staff and agency time, taxpayer money spent hiring a consultant to write the EIR (est. $200,000), this represents a massive waste of financial resources. Considering all the environmental, agricultural and community organizations and individuals with historical interest in this issue, it also represents an immense and unnecessary burden on those most likely to be effected by this activity.

Background:

Following its receipt of the Health Commission's Task Force recommendations advocating local control over sewage sludge land application (seizing it from the Central Coast Regional Water Quality Control Board [CCRWQCB]) on 10-12-99, the BofS directed the Environmental Health Division (EHD) of the Public Health Agency, on 2-8-00, to convene another Task Force to formulate recommendations for an ordinance regulating the land application of sewage sludge.

The EHD convened a broad, multidisciplinary task force consisting of the Farm Bureau, two local sewage plant managers, a Cal Poly soil scientist, CSI, an Agriculture Commissioner representative, the Sierra Club, a sewage sludge composting company, the UC Cooperative Extension, a sewage sludge spreading company, the Air Pollution Control District, a Health Commission member, a CCRWQCB representative, a geologist, the Environmental Center of SLO, a microbiologist, two citizens-at-large, and the Planning Department. Experts from the California Farm Bureau Federation, Cornell University Waste Management Institute, US EPA, UC Riverside, and the State Water Resources Control Board attended meetings and presented their analyses. Representatives from three California counties informed the Task Force about their land application ordinances.

The EHD's Sewage Sludge Land Application Task Force (SSLATF) worked for more than a year (from 9-13-00 until 10-24-01), producing its final report on 10-26-01. Upon receipt of the SSLATF report, the BofS, on 3-12-02, voted to adopt

the report's recommendations as its own directions to staff on drafting an ordinance. Those BofS directions have not been altered since their initial issuance, and are, therefore, currently in effect.

Subsequently, the BofS adopted an Interim Moratorium ordinance allowing land application of historical amounts of sewage sludge, which has been repeatedly extended since 2004, and is currently in effect. This is consistent with BofS direction #7, i.e., to maintain the status quo as a permanent ordinance is being developed. The EHD reports that no permits have been sought or issued since its enactment. Therefore, this effective ban on sewage sludge land application has been the status quo for eleven years.

NONCOMPLIANCE with BofS DIRECTIONS & SSLATF RECOMMENDATIONS

As cited above, CSI has previously submitted comments on the nonconformity of prior iterations of draft permanent ordinances circulated by the EHD, none of which were submitted by the County for CEQA/EIR review. Therefore, rather than rewrite these analyses, excerpts from comments submitted on 1-31-04 regarding a draft issued on 9-23-03 are included herein.

Additionally, in order to shorten the length of this letter, but to further substantiate the fact that this draft ordinance is noncompliant with BofS direction in more detail, this letter will be accompanied by, and include by reference, those 1-31-04 CSI comments (60 pages including a two-page list of references establishing their validity).

SEWAGE SLUDGE CONTAMINANT LEVELS

BofS Direction / SSLATF Recommendation
(<u>emphasis</u> added)

PRIMARY RECOMMENDATION

Identify Option No. 2 as the primary recommendation of the Task Force.

[Create a local ordinance establishing <u>more stringent requirements for quality</u> of acceptable biosolids material….]

<u>Local standards for sewage sludge quality</u> shall be derived from but <u>not limited to</u> state and federal regulations."

Sewage Sludge Quality Standards

<u>Conclusions - Wrong Ordinance being drafted</u>

This draft ordinance conflicts with Board of Supervisors direction re: sewage sludge quality.

It does not set contaminant limits "more stringent" than federal & state regulations.

The contaminant limits used are identical to federal & state limits, which inadequately influence sewage sludge pollution, and permit excessive contamination.

SLO Co. has the authority to set lower limits, and access to the requisite data for doing so.

Recommendations for Correct Ordinance

The EHD should draft an ordinance based on Option #2 as directed by the Board of Supervisors.

Contaminant limits should be set at levels lower than found in federal & state regulations.

SLO Co. should conduct a survey of sewage sludge generated in SLO Co. to determine the ranges of concentrations of contaminants, and base contaminant limits on the concentrations found.

The EHD should consider the contaminant limits proposed by CSI and utilize the process by which they were determined to establish permissive, restrictive & prohibitive limits.

The table below, adapted from those 1-31-04 comments, demonstrates that the draft ordinance would allow land application of sewage sludge much more contaminated than that generated locally, e.g., 7 times, more than 3 times & nearly 5 times more Arsenic, Lead and Mercury, respectively.

Heavy Metal Concentrations in
Locally Generated Compost & Sewage Sludge.
Multiples by which Draft Ordinance Limits Exceed Concentrations Found in
Local Compost and Sewage Sludge
(in mg/kg = ppm)

Heavy Metal	MB Comp (1)	Co Sldg (2) ≤	Ord Cap (3)	**X Co Sldg**
Arsenic	2.6	5.9	41	**7**
Cadmium	3.7	3.9	39	**10**
Chromium	50.9	49	1200	**24.5**
Copper	451.9	890	1500	**1.7**
Lead	33	95	300	**3.2**
Mercury	0.27	3.9	17	**4.6**
Molybdenum	13.4	17	75	**4.4**
Nickel	32.1	58	420	**7.2**
Selenium	<5.5*	11.0	36	**3.3**
Zinc	1031	896	2800	**3.1**

1. MB Comp = Morro Bay Compost: "Exceptional Quality Biosolids Certification, City of Morro Bay–Cayucos Wastewater Treatment Plant, 10-29-08. 503 Metals Analysis Report, A & L Western Agricultural Laboratories, Inc., 9-10-08". Sheet distributed with composted sewage sludge at Morro Bay WWTP in March 2009.
2. Co Sldg = SLO County Sludge: High heavy metal concentrations in 73.5% - 88.9% of sewage sludge generated by two local sewage plants in SLO County in a five-year period (1997-2001) - equal to, or less than (≤), the mg/kg listed.
3. Ord Cap = Draft Ordinance Caps on heavy metal concentrations: The draft permanent ordinance sets sewage sludge heavy metal limits identical to these so-called "EQ" limits included in state and federal regulations.

Setting heavy metal limits at the concentrations found in locally generated

sewage sludge would allow roughly 80% of locally-generated sewage sludge to be land applied, which would incentivize sewage sludge producers to reduce the levels of these sewage sludge heavy metals (a primary purpose of such regulations), and prevent the land application of excessively contaminated sewage sludge.

The complete results and analysis of this local sewage sludge survey are included in Appendix A of CSI's 1-31-04 comments on the 9-23-03 draft ordinance ("Substantive/Structural Aspects of Ordinance Draft").

SOIL CONTAMINANT LEVELS

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATION …

San Luis Obispo County should adopt a sewage sludge land application ordinance using pollution accumulation limits, considering local soil pollutant levels.

Soil Quality Standards

Conclusions - Wrong Ordinance being drafted

This draft ordinance conflicts with Board of Supervisors direction re: soil quality.

It does not [set limits on additions of contaminants to soil (*)] or use local soil quality data in setting cumulative limits.

It relies by default on federal & state soil accumulation limits, which are based on faulty data & questionable assumptions, extremely controversial, inadequately protective, invalid, obsolete, irrelevant to local soil conditions, and permit excessive soil quality degradation.

SLO County has the authority and the means to implement more conservative approaches to cumulative limits which are valid & reliable and simple to develop & use.

The pollutant-balance & soil-based approaches to limiting the addition of contaminants to soil are superior means of preserving the long-term quality & utility of SLO County lands than the approach used in deriving federal & state limits.

Recommendations for Correct Ordinance

The EHD should draft an ordinance complying with Board of Supervisors direction re: soil quality.

The ordinance should set limits on the addition of contaminants to soil and incorporate data on local soil concentrations into those limits.

SLO County should conduct a survey of soils in the county to measure the concentrations of contaminants in uncontaminated background soils.

The EHD should draft an ordinance setting cumulative pollutant limits based on either the pollutant-balance or soil-based approach, or some combination thereof, using data from a local soil survey or data already available in a statewide soil analysis.

(*) This phrase is considered obsolete due to the fact that the current draft does contain limits on soil accumulation.

The table below, adapted from those 1-31-04 comments, demonstrates that the draft ordinance would allow levels of heavy metals to accumulate in soil vastly exceeding those found in uncontaminated California agricultural soil. By using the limits in state & federal regulations for so-called "EQ" sewage sludge (as does the draft) to set limits on soil accumulation, the ordinance would allow soil concentrations to reach the same levels as that in permitted sewage sludge. E.g., Soil concentrations of Cadmium, Lead & Mercury would be allowed to be 108, 13 and 65 higher than in the cited soil.

Heavy Metal Concentrations in California Agricultural Soil and Limits in Draft Ordinance, State & Federal Regulations. Multiples by which Draft Cumulative Limits Exceed Concentrations Found in Uncontaminated Agricultural Soil (in mg/kg = ppm)

Heavy Metal	Soil (158)	Ord Cap (3)		Cum Cap (5)	
			X		**X**
Arsenic	3.5	41	**11.7**		
Cadmium	0.36	39	**108**	20.36	**56.6**
Chromium	122	1200	**9.8**	1622	13.3
Copper	28.7	1500	**52.3**	778.7	**27**
Lead	23.9	300	**12.6**	173.9	**7.28**
Mercury	0.26	17	**65.4**	8.26	**31.8**
Molybdenum	1.3	75	**57.7**		
Nickel	57	420	**7.4**	267	**4.7**
Selenium	0.058	36	**621**	50	863
Zinc	149	2800	**18.8**	1549	**10.4**

Soil (158) = Data base utilized by California Department of Food & Agriculture in fertilizer risk assessments, identifying the maximum & minimum, lower & upper quartile, average & mean concentrations of 46 heavy metals in uncontaminated California agricultural soils (table displays average concentrations): "Background Concentrations of Trace and Major Elements in California Soils" Kearney Foundation Special Report, March 1996. Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California. G.R. Bradford (1), A.C. Chang (1), A.L. Page (1), D. Bakhtar (1), J.A. Frampton (2), and H. Wright (1). (1) Department of Soil and Environmental Sciences, University of California, Riverside. (2) Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, Ca.

3. Ord Cap = Draft Ordinance limits on heavy metal concentrations: The draft ordinance uses the same heavy metal limits it sets on so-called "EQ" sewage sludge and composted sewage sludge to set limits on heavy metal soil accumulation.
5. Cum Cap = Cumulative Cap on heavy metal soil accumulation: Soil concentrations resulting from land applying the most contaminated sewage sludge (non-"EQ", prohibited by this draft) to the maximum legal extent under state and federal regulations.

X = Multiple by which heavy metal concentration exceeds the average occurring in uncontaminated California agricultural soils.

Additionally, using the so-called "EQ" sewage sludge limits as soil accumulation limits would allow higher soil concentrations than permitted under state & federal regulations. E.g., while state & federal regulations permit the

Cadmium level to reach 20.36 ppm, the draft would allow it to reach 39 ppm. For Lead, while state & federal regulations permit a maximum level of 173.9 ppm, the draft would allow it to reach 300 ppm. For Mercury, while state & federal regulations permit a maximum level of 8.26 ppm, the draft would allow it to reach 17 ppm. The legality of setting soil accumulation limits in excess of those allowed under state & federal regulations may be in question.

RANGE of CONTAMINANT LIMITS in SEWAGE SLUDGE & SOIL

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATION …

San Luis Obispo County should incorporate into an ordinance a comprehensive set of constituents including heavy metals, synthetic chemicals, pathogens and other pollutants not limited to those in current state and federal standards, for setting sewage sludge quality and land accumulation limits.

Parameters used in Sewage Sludge & Soil Quality Standards

Conclusions - Wrong Ordinance being drafted

This draft ordinance conflicts with Board of Supervisors direction re: the set of parameters used for determining sewage sludge & soil quality.

This draft ordinance does not employ a range of parameters for setting limits on sewage sludge & soil contamination wider than those in federal & state regulations.

The set of contaminants used in this ordinance to limit sewage sludge & soil pollution is identical to that used in federal & state regulations.

An ordinance restricted to this narrow set of parameters is indefensible in light of current information, the range of contaminants used in other land application regulations, the number of contaminants erroneously exempted from regulation, and the number of contaminants recommended for regulatory consideration.

A range of contaminants wider than used in federal & state regulations for setting limits on sewage sludge & soil pollution is necessary to provide minimal protection of the public & environment.

Information about those contaminants potentially included in sewage sludge & soil pollution limits is readily available to the EHD.

Recommendations for Correct Ordinance

The EHD should draft an ordinance complying with Board of Supervisors direction re: the range of contaminants used to limit sewage sludge & soil pollution.

SLO County should reject reliance on the narrow set of pollutants used in federal & state regulations to limit sewage sludge & soil contamination, and expand the range of heavy metals, synthetic chemicals, pathogens and other contaminants used to set those limits.

The EHD should draft an ordinance incorporating contaminants into its sewage sludge & soil pollution limits that are currently regulated by other land

application practitioners and were erroneously exempted from federal & state regulatory limits, and should consider including those contaminants recommended for regulatory assessment and limitation.

- **Correct Ordinance – Wider Set of Sludge & Soil Quality Parameters**

Numerous elements, heavy metals, compounds, synthetic chemicals and pathogens outside the set of parameters used in federal & state sewage sludge & soil pollution limits are already regulated, identified as having been inappropriately excluded from regulations, or recommended for inclusion in regulatory consideration. This section of comments will not include excerpts from the various scientific reviews regarding erroneous regulatory exclusions or recommended regulatory inclusions, or cite each of the regulations including a wider range of contaminants. Rather, this section will only list those contaminants, or groups of thereof, that fall into those categories. (References citing each of the entries on this list are available from CSI.) This list is not exhaustive, but is illustrative of the range of contaminants that could be used to set limits on sewage sludge & soil pollution in the ordinance being drafted. It should be noted that all practitioners of land application use the nine heavy metals included in 503-based regulations to set limits on sewage sludge & soil contamination, and that the lists included in the tables below include only extra-503 contaminants.

Contaminants Regulated by Other Land Application Practitioners

The table below displays some of the contaminants, additional to those in federal & state regulations, being used by other land application practitioners to set limits on sewage sludge & soil pollution (listed with heavy metals first, synthetic chemicals second & pathogens last).

Contaminants Regulated by Other Land Application Practitioners
Cobalt, PCBs (polychlorinated biphenyls), Dioxins (PCDD - polychlorodibenzodioxins), APE (alkyl phenol ethoxylates), NPE (nonylphenol and nonylphenolethoxylates), Furans (PCDF - polychlorodibenzofurans), PAH (polyaromatic hydrocarbons - acenapthene, phenanthrene, fluorene, flouranthene, pyrene, benzo(b+j+k)fluoranthene, benzo(a)pyrene, benzo(ghi)perylene, indeno(1,2,3-c,d)pyrene), AOX (organohalogenous compounds), DEHP (di(2-ethylhexyl)phthalate), LAS (linear alkyl-benezene sulfonates), Toluene, Enterovirus, Enterobacteria.

ALTERNATIVES ANALYSIS

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATIONS

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts.

Over 14 years, CSI has repeatedly submitted comments on the failure of the County to implement this direction, in response to previous iterations of proposed permanent sewage sludge land application ordinances. Recipients of these comment letters include: the BofS, EHD, Planning Department and Commission, Agriculture Liaison Advisory Board, Agricultural Commissioner, Health Commission, Health Officer, and Water Resources Advisory Committee.

Included below are excerpts from two comment letters submitted in 2008 and 2003, which cite CSI's 2001 recommendation to conduct such an analysis.

2008 CSI Comment Letter:

to: Environmental Health Division (EHD) of SLO County Health Department
re: Draft Ordinance regulating Sewage Sludge Land Application issued 7-25-08
date: 11-3-08
cc: SLO Co. Board of Supervisors (BofS), Planning Commission, Planning Department Environmental Division, Agriculture Liaison Advisory Board, Agricultural Commissioner, Health Commission, Health Officer, Water Resources Advisory Committee.

…

1. Draft is Premature – No Alternatives or Impacts Analysis

No alternative means of managing sewage sludge, other than land application, have been analyzed. This fails to comply with Direction #6, cited below, in which the BofS directed EHD to conduct such an analysis, including all viable management methods and a comparison of their effects, as it formulated a permanent ordinance. Before the BofS issued that direction, the Planning Commission advised the BofS to conduct that analysis prior to committing resources to devising an ordinance authorizing the land application means of sewage sludge disposition. That direction and advice are below (emphasis added).

PRIMARY RECOMMENDATION…

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts. (2)

In its 11-28-01 comments, CSI submitted twelve recommendations regarding implementation of the SSLATF recommendations, the first of which was conducting such an analysis of alternatives prior to developing an ordinance permissive of land application:

"CSI Recommendation #1: Analysis of Sewage Sludge Management Alternatives

The Board of Supervisors should commission an analysis of all available methods of sewage sludge use &/or disposal to identify, evaluate & compare their potential economic, health & ecological risks & benefits.

This analysis should precede any commitment of any county resources or policy toward any management method, including the land application

alternative." (7)

In its 12-9-03 comments regarding the procedural aspects of permanent ordinance development, CSI devoted six pages to the failure to analyze alternatives and their relative impacts (under "Analysis of Alternatives to Sewage Sludge Land Application Absent" beginning on page 6 (4)). CSI cited federal legal authority for such discretionary power, the Agriculture & Open Space Element, BofS direction, Planning Commission and SSLATF recommendations, and the recommendations of a number of local organizations submitted to the BofS advocating such an analysis prior to the development of an ordinance permitting sewage sludge land application, including the Sierra Club, ECOSLO, SLO Coast Alliance, Friends of the RanchLand, SLO Cancer Action Now, Life On Planet Earth and Central Coast Peace and Environmental Council.

Additionally, in those 2003 comments, CSI cited two prior CSI submissions to the BofS and SSLATF regarding economically and environmentally feasible alternatives to sewage sludge land application. The first, dated 4-6-01, demonstrated five distinct advantages to landfilling sewage sludge over land applying it (5). The second, dated 3-5-02, demonstrated the existence of two dozen ways in which sewage sludge is used profitably to produce methane, ethanol, hydrogen, fuel oil & pellets, heat, electricity, and construction materials (6).

The science, technology and economics of the uses of sewage sludge alternative to land application have advanced significantly in the years since the BofS and EHD received advice to conduct an analysis of those methods and their relative effects prior to committing County resources toward drafting an ordinance permissive of sewage sludge land application.

<u>2003 CSI Comment Letter:</u>

to: Environmental Health Division (EHD) 12-10-03
SLO Co. Public Health Department
Attn: Rich Lichtenfels, REHS

re: SLO Co. Ordinance Regulating the Land Application of Treated Sewage Sludge/Biosolids
(9-23-03 Draft made available for comment through 1-30-04)

- **Procedural/Developmental Aspects of Ordinance Processing**

…

- **Analysis of Alternatives to Sewage Sludge Land Application Absent**

No analysis of methods of sewage sludge management other than land application has been conducted by any task force, advisory body or agency in SLO County. The LATF was explicitly directed by the EHD to formulate recommendations for an ordinance permissive of land application, and to exclude any comparative analysis of alternatives from its deliberations. Neither did the prior Health Commission Task Force analyze any alternative to land application. Thus, two successive years of multidisciplinary work by these two bodies have been devoted exclusively to examining the implications of, and formulating

guidance regarding, one management method only. To proceed toward approval of, or investment in, any particular alternative under these circumstances would not only be premature and illogical, but it would also be in conflict with County policy, be contrary to recommendations received from the Planning Commission and various local organizations & individuals, and be negligent of information the County has received regarding economically & technically viable and potentially preferable methods of use & management. It would also leave a primary LATF recommendation unfulfilled.

…

All of these recommendations were submitted to the Board of Supervisors prior to its 3-12-02 hearing on the 10-26-01 LATF Report & Recommendations. Regardless, the Board voted to direct staff to draft an ordinance permitting land application without examining any alternatives.

…

Information submitted to SLO Co. re: viable & preferable alternatives to land application

CSI submitted two papers to the SLO Co. Board of Supervisors and LATF analyzing a range of alternatives to sewage sludge land application. These papers demonstrated that there are economically & technically viable methods of sewage sludge management other than land application, and that a number of them may be preferable to land application from environmental, public health and agricultural productivity & marketing perspectives. These papers were submitted in advance of the Board's 3-12-02 vote to direct staff to draft an ordinance permitting land application.

…

Alternatives Analysis Required & Cheaper Prior to & Outside Scope of CEQA-based EIR

A comparative analysis of sewage sludge management alternatives prior to the drafting of a permissive ordinance is preferable to an analysis of a proposed ordinance pursuant to CEQA (California Environmental Quality Act) requirements. This is because it would be less expensive and more comprehensive than a CEQA-based EIR review of a proposed ordinance. Whereas an EIR/CEQA analysis of alternatives to a proposed ordinance would be limited to assessing the direct and physical environmental impacts of the selected alternatives to that project, an analysis of alternatives conducted outside the parameters of CEQA could entail consequences other than environmental impacts.

…

The 12-2-03 Staff Report regarding the Interim Moratorium contains a section titled "Final Treated Sewage Sludge/Biosolids Ordinance" in which it is reported that:

> "It is anticipated that the final biosolids ordinance may require an Environmental Impact Report (EIR) and cost at least $100,000. The actual cost will not be known until a consultant can be selected. The Public Health Department budget cannot absorb the cost of the EIR and will need an augmentation from the General Fund to pay for it. It is also anticipated

that the EIR will take at least a year to complete."

This expense of taxpayer funds, county staff time and effort would be premature, wasteful and misdirected under current circumstances. CSI has previously demonstrated that a preliminary analysis of alternatives to sewage sludge land application has been performed without any cost to SLO County (see above section). This analysis included parameters outside those to which a CEQA- based EIR alternatives analysis would be limited, as should any comprehensive look at options available to and under the jurisdiction of SLO County.

PUBLIC NOTIFICATION AND PARTICIPATION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure adequate public & community notification of project proposals, including opportunities to comment regarding them.

The proposed draft ordinance includes the sections below:

8.13.180 Appeals.

Any applicant aggrieved by the refusal of the Department to issue a permit or by the terms of a permit, may appeal the action to the County Health Officer by filing a written notice of appeal to the Department. The County Health Officer's decision can also be appealed to the Board of Supervisors. Such an appeal would be subject to the appeal procedures set forth by the Board of Supervisors. The Department will recover the costs of an appeal from the permit applicant.

8.13.090 Notification.

Notification of adjacent property owners is required at least fourteen (14) days prior to the scheduled land application. Notification shall be made in such a way that written proof is available documenting notification was made to adjacent property owners. Public notifications may be necessary depending on the location of the receiver site, such as signage alerting the public of scheduled land application.

Post land application access to receiver sites shall be limited to authorized personnel until biosolids material is incorporated into the soil.

Neither of these sections provide "public & community… opportunities to comment regarding" pending sewage sludge land application projects. Neither do they provide any means by which neighbors or the public may object to, or appeal, any pending decision regarding any permit. Additionally, they fail to

provide for means by which the public would be adequately informed of any pending land application projects.

The provision of a means by which applicants can appeal the denial (or the conditions) of a permit, while simultaneously denying neighbors and the general public of a means to appeal a decision to permit a pending land application project is a violation of this BofS direction. This draft ordinance, therefore, enables the spreading of sewage sludge at the expense of public notification and participation.

In its 11-3-08 comments on the proposed draft permanent ordinance issued on 7-25-08, CSI wrote:

5. Draft includes No Public or Landowner Notification or Consent

This draft ordinance includes no procedure for providing members of the public advance notification of sewage sludge land application proposals and the ability to comment on them…

The absence of any provisions for notification of members of the public and community potentially interested in sewage sludge land application proposals and for the opportunity to comment on them (#7) is utterly unacceptable, without any justification and completely contrary to BofS direction…

This draft, however does provide for notification of nearby neighbors about a pending land application project, but no notification of the broader "public & community".

LAND OWNER NOTIFICATION & INFORMED CONSENT

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.

The proposed draft ordinance includes the section below:

8.13.090 Notification.

Notification of adjacent property owners is required at least fourteen (14) days prior to the scheduled land application. Notification shall be made in such a way that written proof is available documenting notification was made to adjacent property owners. Public notifications may be necessary depending on the location of the receiver site, such as signage alerting the public of scheduled land application.

The proposed draft contains no provisions for notifying owners of land upon which sewage sludge land application is proposed of the potential dangers and benefits of the activity, and fails to require the "prior informed consent" of landowners. This deficiency conflicts with BofS direction, leaves landowners exposed to degradation of soil quality and property values, and diminishes landowners' right to be adequately informed of the potential consequences.

CSI has submitted comments on this deficiency in prior iterations of proposed permanent ordinances for 14 years, as the excerpts below demonstrate.

In its 11-3-08 comments on the proposed draft permanent ordinance issued on 7-25-08, CSI wrote:

5. Draft includes No Public or Landowner Notification or Consent

This draft ordinance includes… no procedure for informing landowners about the potential deleterious and beneficial effects of sewage sludge usage or for obtaining their informed prior consent…

The failures to provide, however, landowners… (i.e., those most immediately and significantly effected by this activity) with accurate information regarding the possible consequences and to obtain prior landowner informed consent (#s 9 & 10) are the more egregious of these omissions.

In its 1-31-04 comments on the substantive aspects of the prior draft permanent ordinance, CSI devoted two pages to the landowner notification and consent provisions of Direction #9 (under "Informed Consent of Property Owner is Mandatory" beginning on page 47). CSI relied on the research and recommendations of the Calif. Farm Bureau Federation to substantiate the necessity of specific procedures for landowner notification and consent, and concluded "The absence of a specific & separate informed consent document in this draft ordinance unacceptably leaves property owners inadequately informed of potential consequences.".

CSI's recommendation is below (<u>emphasis</u> added).

> "SLO County should draft an ordinance including a <u>formal prior consent document</u> fully informing property owners of the <u>potential adverse consequences</u> of sewage sludge land application." (8)

In its 11-28-01 comments, CSI explicitly supported Directions #9 & 10:

"CSI Recommendation #9: Public, Consumer & Landowner Information, Involvement & Consent…

- specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.

CSI's 1-31-04 Comments:

Sole Liability & Consent Expose Property Owner to Unfair Risk

<u>Conclusions - Wrong Ordinance being drafted</u>

The absence of a formal informed consent document leaves property owners inadequately informed of potential consequences, and is in conflict with the direction of the Board of Supervisors.

Recommendations for Correct Ordinance

The EHD should draft an ordinance including a formal prior consent document fully informing property owners of the potential adverse consequences of sewage sludge land application, in compliance with Board of Supervisors direction.

PROPERTY RECORD DOCUMENTATION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure property records document any land application activity and the availability of information regarding that activity, so prospective land purchasers and appraisers may be fully informed.

The proposed draft ordinance includes a section titled:
8.13.110 Recordkeeping and Reporting.

Rather than insert the section here, it is sufficient to report that it includes no mention of property records, property record documentation, or the necessity to inform prospective landowners and appraisers of the fact sewage sludge had been applied to the subject land. This deficiency is in conflict with this BofS direction, and exposes potential landowners to significant risks. The omission of this protective measure is a violation of the right of land purchasers to know the amounts of the various sewage sludge contaminants deposited on the property.

Rather than citing previous CSI comments on this issue, this letter will simply include an excerpt below from Chapter 5 ("Recommendations") of a briefing book CSI presented to the BofS, the SSLATF and others in 1999. It is from the California Farm Bureau Federation, which sent an expert representative to SLO County Sewage Sludge Land Application Task Force meetings.

> "A means for tracking sewage sludge applications so that future owners/operators can find out whether sewage sludge previously were used on the property must be implemented. Future owners/operators may want to avoid property that has received sewage sludge applications, whether because of existing or future crop restrictions, effects on land values, organic farming requirements or health concerns and a current owner may be unwilling to disclose that sewage sludge were used on the property if the sale could be jeopardized. Hence, a system to track sewage sludge applications and a way of informing future owners/operators about this 'system' should be created now, and not left for future resolution." *

* Calif. Farm Bureau Federation comments, 5-29-98 re: Draft General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use in Agricultural, Silvicultural, Horticultural, & Land Reclamation Activities; Calif. State Water Resources Control Board.

CSI was informed, immediately after the 11-12-15 EIR Scoping meeting, by the County lead agency on drafting sewage sludge land application ordinances (Environmental Health Division of the Health Agency) that the intent was to include this property-record requirement in this draft ordinance. The EHD acknowledged that its omission is an error.

LANDOWNER LIABILITY PROTECTION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Fees and Financial Considerations

San Luis Obispo County should incorporate into an ordinance:

- requirements for project proponents to post performance bonds & obtain insurance coverage, including pollution liability, to recompense parties potentially impacted by related remediation and/or litigation.

The proposed draft ordinance includes the section below:

8.13.140 Liability.

The generator and preparer of the biosolids are liable for the material if its land application results in a public health or environmental problem. Landowners (including their lenders) and leaseholders who use biosolids beneficially as a fertilizer substitute or soil conditioner in accordance with the USEPA Part 503 regulations are protected from liability under Superfund legislation, as well as any enforcement action from USEPA under the Part 503 rule. Where the federal requirements are not followed, appliers of biosolids are vulnerable to enforcement actions and can be required to remediate any problems for which they are liable.

The receiver site landowner/leaseholder shall obtain assurances from the generator and preparer via official documentation that any biosolids being land applied are of the appropriate quality and have been sufficiently prepared and that the application procedures used meet the requirements of the federal, state and county land application regulations. Copies of this documentation will be provided to the Department as a condition of approval for permit issuance.

On a case-by-case basis, the Department may require pollution liability insurance be obtained by the property owner or leaseholder.

This section of the draft ordinance omits any reference to "project proponents" (sewage sludge generators, haulers and appliers) posting performance bonds &/or obtaining pollution liability insurance. There is no

explicit provision ensuring that landowners (parties) are entitled to protection from remediation &/or litigation costs. The only mention of pollution liability insurance is in reference to the EHD requiring it of the landowner, at the EHD's discretion. This appears to be non-compliant with BofS direction and leave landowners vulnerable to financial damages resulting from activities of other project participants.

In its 1-31-04 comments, CSI devoted five pages to this topic, primarily composed of excerpts from expert analysis regarding assignation of financial and legal responsibility stemming from sewage sludge land application. Below are some of them which provide guidelines for providing an equitable distribution of the financial and legal burdens. They are included in those comments under the section titled:

Sole Liability & Consent Expose Property Owner to Unfair Risk

From the US EPA:

"… one way for a project sponsor to overcome such reluctance is to offer to indemnify such participants for any liabilities they incur or damages they suffer themselves, as a result of their participation.

The project sponsor is ordinarily in the best position to assess the risks of the project. Thus, if it can satisfy itself that the risks are outweighed by the benefits, it can provide reassurance to other participants by voluntarily assuming those risks. The indemnity agreement should explicitly state if the sponsor is assuming liability for even those harms resulting from the negligence of other project participants, since such indemnity may be demanded as a condition of participation." [31]

31. EPA "Institutional Constraints & Public Acceptance Barriers to Utilization of Municipal Wastewater & Sludge for Land Reclamation & Biomass Production", U.S. EPA Office of Water Program Operations, Municipal Construction Division. EPA 430/9-81-013. 7-81.

From the California Farm Bureau Federation:

"No. 107

Sewage Sludge Disposal …

Farmers should protect themselves from risks by securing an indemnification and hold harmless agreement with sludge generator and others associated with the application, underwritten by an appropriate private or public insurer. … All liability for pollution caused by sludge, that was otherwise legally applied, shall be borne by the sludge generator." (176)

"Finally, CFBF recommends that all treatment facilities supplying sewage sludge for land application on agricultural properties be required to provide, in writing, a formal 'Indemnification/Hold Harmless' requirement. … Clearly, a direct link of responsibility between the treatment facility and farmer would resolve many of these concerns as well as simplifying the legal process in the event a farmer is injured and requires restitution. [26. b]

re: "…a formal "Indemnification/Hold Harmless" requirement. The reason for such a requirement is the concern that contractual relationships between treatment facilities and applicators may purport to limit the ability of an injured farmer to seek restitution from the responsible treatment facility, e.g., Class B sewage sludge mislabeled as Class A, etc. In many cases, applicators are paid to remove sewage sludge from a treatment facility under a contract limiting the treatment facility's liability only to the applicator, since the applicator now owns the sewage sludge. … There are problems with such an arrangement. First, it is unclear, if the above is indeed a typical arrangement, what rights the farmer has for full reimbursement of losses. Will the applicator reimburse all cleanup expenses, loss of crops (now and until cleanup is complete), loss of property value, other incidental expenses, etc.? Second, what if the applicator goes bankrupt or no longer operates in California, who will honor the contract with the farmer? Finally, why should the farmer be forced into this third party arrangement in the first place?" [26. b]

176. Farm Bureau Policies 2001, Ag Alert (official publication of the California Farm Bureau Federation), vol. 27, # 46, 12-27-00.

26. b Calif. Farm Bureau Federation comments, 5-29-98 re: Draft General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use in Agricultural, Silvicultural, Horticultural, & Land Reclamation Activities; Calif. State Water Resources Control Board.

From the National Academy of Sciences, National Research Council:

"After studying the issue, the Farm Credit Institutions of the Northeast (an organization of farm credit banks) determined that assurances may be needed to cover the economic risk. They proposed that farmers seeking their loans through mortgage financing should make sure that the POTW that provides them with sludge will indemnify them in the event of hazardous waste liabilities that result from application of the sludge." [38]

38. "Use of Reclaimed Water & Sludge in Food Crop Production", National Research Council, National Academy Press, 1996.

From Boston College:

"It is therefore, not surprising that Farm Credit Institutions, consisting of major farm lenders in the United States, have also raised concerns over the potential damage to farmer livelihood should properties be subjected to the potential liabilities discussed above. Naturally, lenders do not wish to be subject to joint and several liability, and wish to preserve land productivity and value. Under CERCLA, ownership alone triggers liability, even though the owner has not actually participated in generating or disposing of the substance. Lenders have been found liable for clean ups even if they did not acquire the property, but had the capacity to affect hazardous waste disposal decisions. … If, however, a lender becomes an owner by foreclosing and taking title to the property, or by conducting management activities at the site, he is potentially liable." [164]

164. "Unsafe Sewage Sludge or Beneficial Biosolids?: Liability, Planning, and

Management Issues Regarding the Land Application of Sewage Treatment Residuals", W. Goldfarb, U. Krogmann, C. Hopkins. Boston College Environmental Affairs Law Review, vol. 26, Summer #4, 1999.

CONCLUSION

CSI declares that the above constitutes evidence sufficient to demonstrate that this proposed draft ordinance fails to qualify for submission to the CEQA/EIR process, due to the fact that it fails to conform to the directions of the SLO County Board of Supervisors and recommendations of the SLO County Sewage Sludge Land Application Task Force. Furthermore, the facts that this failure encompasses a multiplicity of elements fundamental to the construction of such an ordinance, and is so extreme in those failures, it is incumbent on SLO County to cease the CEQA/EIR process and proceed with drafting an ordinance in conformity with the directions and recommendations developed over years of intense work by a wide range of community interests. Ignoring that work would be unconscionable.

David Broadwater
Center for Sludge Information

To: fmecham@co.slo.ca.us, bgibson@co.slo.ca.us, ahill@co.slo.ca.us, lcompton@co.slo.ca.us, darnold@co.slo.ca.us, cr_board_clerk@co.slo.ca.us, jcaruso@co.slo.ca.us, elcarroll@co.slo.ca.us, jhamm@co.slo.ca.us, rlichten@co.slo.ca.us, jwhite@co.slo.ca.us, agcommslo@co.slo.ca.us,
Cc:
Bcc:
Subject: Fw: SLO Co. Sewage Sludge Ordinance - Wrong / Cease EIR Process
From: Jeff Hamm/PH/COSLO - Friday 11/20/2015 03:56 PM

All,

In response to David Broadwater's email regarding the draft Land Application of Biosolids ordinance and EIR process (below), please be advised that the draft ordinance was designed by staff to include the Board of Supervisors direction as it was provided in 2002. In drafting the ordinance, the Department has worked to substantially meet the intentions of the Board while also ensuring it is significantly protective of public health and the environment. In consultation with Planning Department staff, we will receive Mr. Broadwater's comments as we receive other stakeholder comments and move forward with the EIR/NOP process. An acknowledgement of receipt of Mr. Broadwater's comments will be sent separately to him by County Planning.

If you have any questions about the process, please feel free to contact Liz Pozzebon, our new Director of Environmental Health, James Caruso of County Planning & Building, or me.

Thank you.

Jeff Hamm
Health Agency Director

----- Forwarded by Jeff Hamm/PH/COSLO on 11/20/2015 03:11 PM -----

From: David Broadwater <csi@thegrid.net>
To: fmecham@co.slo.ca.us, bgibson@co.slo.ca.us, ahill@co.slo.ca.us, lcompton@co.slo.ca.us, darnold@co.slo.ca.us, cr_board_clerk@co.slo.ca.us, jcaruso@co.slo.ca.us, elcarroll@co.slo.ca.us, jhamm@co.slo.ca.us, rlichten@co.slo.ca.us, jwhite@co.slo.ca.us, agcommslo@co.slo.ca.us, mlea@co.slo.ca.us, jp.wolff@wolffvineyards.com, mbandov@co.slo.ca.us, planningcommission@co.slo.ca.us, Joy Fitzhugh <joy@slofarmbureau.org>
Date: 11/19/2015 11:00 AM
Subject: SLO Co. Sewage Sludge Ordinance - Wrong / Cease EIR Process

SLO County Governmental Bodies;
Board of Supervisors, Planning Department & Environmental Coordinator, Health Agency & Environmental Health Division, Health Commission, Agricultural Commissioner, Agriculture Liaison Advisory Board, Water Resources Advisory Committee, Planning Commission.

re: Draft Sewage Sludge Land Application Ordinance - CEQA/EIR Review Initiated 11-2-15
Wrong Ordinance – Noncompliant with Board of Supervisors Directions
Cease CEQA-EIR Process / Submit Correct Ordinance for Review

On 11-2-15, the Planning Department issued an NOP regarding the preparation of an EIR on a draft permanent ordinance regulating/permitting sewage sludge land application on agricultural lands used for growing human food, animal feed and grazing livestock. On 11-3-15, the Central Services Department - Purchasing Division issued an RFP for consultants to submit bids for conducting the EIR with a deadline of 12-4-15. The Planning Department has opened a CEQA Public Scoping Period for submission of recommendations regarding issues to be analyzed in the EIR, which will close on 12-18-15.

This draft ordinance fails to conform with eight of the BofS directions to staff regarding constructing an ordinance permissive of sewage sludge land application.
These failures pertain to the central purpose of creating such an ordinance, not to peripheral or incidental matters. See the attached letter.
Years of work by two large, multidisciplinary task forces went into formulating recommendations for drafting an SLO County ordinance regulating sewage sludge land application. The BofS endorsed those recommendations and directed County staff to implement them.
The attached letter demonstrates in detail how this draft ordinance conflicts with BofS directions. The eight failures to comply which disqualify this draft ordinance for CEQA/EIR consideration are listed on the first page, followed by recommendations for rectification (ceasing the CEQA/EIR process, etc.)
and some background information. The rest of the 19-page letter contains detailed analyses of each of the eight non-compliant elements of the proposed draft ordinance, and the significance of each.

Please take the time to read the attached letter, and to consider taking the actions recommended. This is a matter that could entail long-term effects on SLO County's agricultural viability, environmental integrity and public health.
David Broadwater
Center for Sludge Information
[attachment "Wrong Ord. - BofS Directs – Stop EIR 12-18-15.pdf" deleted by Jeff Hamm/PH/COSLO]

To: Frank Mecham <fmecham@co.slo.ca.us>, Bruce Gibson <bgibson@co.slo.ca.us>, Adam Hill <ahill@co.slo.ca.us>, lcompton@co.slo.ca.us, Debbie Arnold <darnold@co.slo.ca.us>, cr_board_clerk@co.slo.ca.us, jcaruso@co.slo.ca.us,

Cc:

Bcc:

Subject: another vote AGAINST spreading sewage sludge on SLO County farms

From: Terre Dunivant <gaia@charter.net> - Friday 11/20/2015 07:57 PM

1 attachment

Wrong Ord. - BofS Directs - Stop EIR 12-18-15.pdf

Hello,

Sewage sludge is highly contaminated and should never be applied or dumped on land that is used to grow crops or graze animals. In that scenario, the stuff wouldn't even be monitored to make sure it's not fouling the water.

The current CEQA/EIR process for this draft ordinance needs to be stopped so a proper ordinance can be drafted that follows the Board of Supervisor's directions to analyze other methods for managing sludge to better protect the local environment and residents. Then start the new CEQA/EIR.

I think sewage sludge should be LANDFILLED, where appropriate filtration will keep hazardous chemicals, pharmaceuticals and heavy metals out of waterways and away from our food. In a landfill, sludge becomes a resource instead of a waste product, and can be sensibly managed to produce fuel, electricity and even construction materials.

In any case, this question needs current analysis.

Thanks for your consideration,

Terre Dunivant
San Luis Obispo

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Terre Dunivant
San Luis Obispo, California

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CSI: Center for Sludge Information
Advocacy through Acquisition, Analysis and Articulation of Information re:
Land Application of Sewage Sludge
6604 Portola Rd., Atascadero, Calif. 93422. ph# (805) 466-0352. Email: csi@thegrid.net

to: SLO County Planning & Building Department and Environmental Division

re: Proposed Permanent Sewage Sludge Land Application Ordinance
- **Wrong Ordinance – Fails to Conform with Board of Supervisors Directions & Task Force Recommendations**
- **Cease CEQA-EIR Process / Submit Correct Ordinance for Review**

date: 11-19-15

On 11-2-15, the SLO Co. Planning Department issued a Notice of Preparation regarding the initiation of the CEQA/EIR process on a draft permanent ordinance regulating and permitting the land application of sewage sludge. It initiated a Scoping Period ending on 12-18-15 to allow organizations, agencies and the public to submit recommendations regarding issues to be analyzed in the EIR.

This draft ordinance fails to comply with numerous BofS directions regarding how to construct such an ordinance. These failures undermine the very foundation of the ordinance, which are central to all sewage sludge land application regulations:
- The levels of contaminants allowed in land applied sewage sludge,
- The levels of contaminants allowed to accumulate in soil, and
- The range of contaminants used to limit the levels of contaminants in both sewage sludge and soil.

These are the core matters that determine the short- and long-range impacts of this activity on public health, ecological integrity and agricultural viability.

Additionally, this draft ordinance fails to comply with other important BofS directions designed to ensure that:
- SLO County doesn't blindly forge ahead with land application as the preferred means of sewage sludge disposal without analyzing other methods of disposal or use,
- The public is notified of pending land application projects and provided the opportunity to comment on them,
- Landowners are informed of the potential dangers and benefits of land application, and provide informed consent prior to receiving the material on their property,
- County property records document the depositing of any sewage sludge to inform potential buyers and appraisers of that activity prior to sale,
- Those generating and applying sewage sludge post performance bonds and obtain pollution liability insurance to protect landowners from remediation and litigation costs.

Item No. 15
Meeting Date: January 12, 2016
Presented by: Terre Dunivant
Rec'd prior to meeting & posted to web on: January 7, 2016

These failures to follow BofS directions on formulating such an ordinance render this draft ordinance unqualified for submission to the CEQA/EIR process.

Although previous iterations of permanent ordinances have contained most of these deficiencies (about which CSI has repeatedly submitted comments), this is the first version to be subjected to the CEQA/EIR process.

RECOMMENDATIONS:

1. Cease the CEQA/EIR processing of this draft ordinance,
2. Draft an ordinance compliant with BofS directions, and
3. Initiate the CEQA/EIR process when such an ordinance is formulated.

CSI is fully prepared and willing to participate in a CEQA/EIR process on a permanent ordinance regulating and permitting sewage sludge land application, but is strongly opposed to subjecting this draft to that process due to its failures to qualify as an ordinance conforming with BofS directions.

Due to the costs the County will incur processing this deficient draft, in terms of staff and agency time, taxpayer money spent hiring a consultant to write the EIR (est. $200,000), this represents a massive waste of financial resources. Considering all the environmental, agricultural and community organizations and individuals with historical interest in this issue, it also represents an immense and unnecessary burden on those most likely to be effected by this activity.

Background:

Following its receipt of the Health Commission's Task Force recommendations advocating local control over sewage sludge land application (seizing it from the Central Coast Regional Water Quality Control Board [CCRWQCB]) on 10-12-99, the BofS directed the Environmental Health Division (EHD) of the Public Health Agency, on 2-8-00, to convene another Task Force to formulate recommendations for an ordinance regulating the land application of sewage sludge.

The EHD convened a broad, multidisciplinary task force consisting of the Farm Bureau, two local sewage plant managers, a Cal Poly soil scientist, CSI, an Agriculture Commissioner representative, the Sierra Club, a sewage sludge composting company, the UC Cooperative Extension, a sewage sludge spreading company, the Air Pollution Control District, a Health Commission member, a CCRWQCB representative, a geologist, the Environmental Center of SLO, a microbiologist, two citizens-at-large, and the Planning Department. Experts from the California Farm Bureau Federation, Cornell University Waste Management Institute, US EPA, UC Riverside, and the State Water Resources Control Board attended meetings and presented their analyses. Representatives from three California counties informed the Task Force about their land application ordinances.

The EHD's Sewage Sludge Land Application Task Force (SSLATF) worked for more than a year (from 9-13-00 until 10-24-01), producing its final report on 10-26-01. Upon receipt of the SSLATF report, the BofS, on 3-12-02, voted to adopt

the report's recommendations as its own directions to staff on drafting an ordinance. Those BofS directions have not been altered since their initial issuance, and are, therefore, currently in effect.

Subsequently, the BofS adopted an Interim Moratorium ordinance allowing land application of historical amounts of sewage sludge, which has been repeatedly extended since 2004, and is currently in effect. This is consistent with BofS direction #7, i.e., to maintain the status quo as a permanent ordinance is being developed. The EHD reports that no permits have been sought or issued since its enactment. Therefore, this effective ban on sewage sludge land application has been the status quo for eleven years.

NONCOMPLIANCE with BofS DIRECTIONS & SSLATF RECOMMENDATIONS

As cited above, CSI has previously submitted comments on the nonconformity of prior iterations of draft permanent ordinances circulated by the EHD, none of which were submitted by the County for CEQA/EIR review. Therefore, rather than rewrite these analyses, excerpts from comments submitted on 1-31-04 regarding a draft issued on 9-23-03 are included herein.

Additionally, in order to shorten the length of this letter, but to further substantiate the fact that this draft ordinance is noncompliant with BofS direction in more detail, this letter will be accompanied by, and include by reference, those 1-31-04 CSI comments (60 pages including a two-page list of references establishing their validity).

SEWAGE SLUDGE CONTAMINANT LEVELS

BofS Direction / SSLATF Recommendation
(<u>emphasis</u> added)

PRIMARY RECOMMENDATION

Identify Option No. 2 as the primary recommendation of the Task Force.

[Create a local ordinance establishing <u>more stringent requirements for quality</u> of acceptable biosolids material….]

<u>Local standards for sewage sludge quality</u> shall be derived from but <u>not limited to</u> state and federal regulations."

Sewage Sludge Quality Standards

<u>Conclusions - Wrong Ordinance being drafted</u>

This draft ordinance conflicts with Board of Supervisors direction re: sewage sludge quality.

It does not set contaminant limits "more stringent" than federal & state regulations.

The contaminant limits used are identical to federal & state limits, which inadequately influence sewage sludge pollution, and permit excessive contamination.

SLO Co. has the authority to set lower limits, and access to the requisite data for doing so.

Recommendations for Correct Ordinance

The EHD should draft an ordinance based on Option #2 as directed by the Board of Supervisors.

Contaminant limits should be set at levels lower than found in federal & state regulations.

SLO Co. should conduct a survey of sewage sludge generated in SLO Co. to determine the ranges of concentrations of contaminants, and base contaminant limits on the concentrations found.

The EHD should consider the contaminant limits proposed by CSI and utilize the process by which they were determined to establish permissive, restrictive & prohibitive limits.

The table below, adapted from those 1-31-04 comments, demonstrates that the draft ordinance would allow land application of sewage sludge much more contaminated than that generated locally, e.g., 7 times, more than 3 times & nearly 5 times more Arsenic, Lead and Mercury, respectively.

Heavy Metal Concentrations in
Locally Generated Compost & Sewage Sludge.
Multiples by which Draft Ordinance Limits Exceed Concentrations Found in Local Compost and Sewage Sludge
(in mg/kg = ppm)

Heavy Metal	MB Comp (1)	Co Sldg (2) ≤	Ord Cap (3)	**X Co Sldg**
Arsenic	2.6	5.9	41	**7**
Cadmium	3.7	3.9	39	**10**
Chromium	50.9	49	1200	**24.5**
Copper	451.9	890	1500	**1.7**
Lead	33	95	300	**3.2**
Mercury	0.27	3.9	17	**4.6**
Molybdenum	13.4	17	75	**4.4**
Nickel	32.1	58	420	**7.2**
Selenium	<5.5*	11.0	36	**3.3**
Zinc	1031	896	2800	**3.1**

1. MB Comp = Morro Bay Compost: "Exceptional Quality Biosolids Certification, City of Morro Bay–Cayucos Wastewater Treatment Plant, 10-29-08. 503 Metals Analysis Report, A & L Western Agricultural Laboratories, Inc., 9-10-08". Sheet distributed with composted sewage sludge at Morro Bay WWTP in March 2009.
2. Co Sldg = SLO County Sludge: High heavy metal concentrations in 73.5% - 88.9% of sewage sludge generated by two local sewage plants in SLO County in a five-year period (1997-2001) - equal to, or less than (≤), the mg/kg listed.
3. Ord Cap = Draft Ordinance Caps on heavy metal concentrations: The draft permanent ordinance sets sewage sludge heavy metal limits identical to these so-called "EQ" limits included in state and federal regulations.

Setting heavy metal limits at the concentrations found in locally generated

sewage sludge would allow roughly 80% of locally-generated sewage sludge to be land applied, which would incentivize sewage sludge producers to reduce the levels of these sewage sludge heavy metals (a primary purpose of such regulations), and prevent the land application of excessively contaminated sewage sludge.

The complete results and analysis of this local sewage sludge survey are included in Appendix A of CSI's 1-31-04 comments on the 9-23-03 draft ordinance ("Substantive/Structural Aspects of Ordinance Draft").

SOIL CONTAMINANT LEVELS

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATION …

San Luis Obispo County should adopt a sewage sludge land application ordinance using pollution accumulation limits, considering local soil pollutant levels.

Soil Quality Standards

Conclusions - Wrong Ordinance being drafted

This draft ordinance conflicts with Board of Supervisors direction re: soil quality.

It does not [set limits on additions of contaminants to soil (*)] or use local soil quality data in setting cumulative limits.

It relies by default on federal & state soil accumulation limits, which are based on faulty data & questionable assumptions, extremely controversial, inadequately protective, invalid, obsolete, irrelevant to local soil conditions, and permit excessive soil quality degradation.

SLO County has the authority and the means to implement more conservative approaches to cumulative limits which are valid & reliable and simple to develop & use.

The pollutant-balance & soil-based approaches to limiting the addition of contaminants to soil are superior means of preserving the long-term quality & utility of SLO County lands than the approach used in deriving federal & state limits.

Recommendations for Correct Ordinance

The EHD should draft an ordinance complying with Board of Supervisors direction re: soil quality.

The ordinance should set limits on the addition of contaminants to soil and incorporate data on local soil concentrations into those limits.

SLO County should conduct a survey of soils in the county to measure the concentrations of contaminants in uncontaminated background soils.

The EHD should draft an ordinance setting cumulative pollutant limits based on either the pollutant-balance or soil-based approach, or some combination thereof, using data from a local soil survey or data already available in a statewide soil analysis.

(*) This phrase is considered obsolete due to the fact that the current draft does contain limits on soil accumulation.

The table below, adapted from those 1-31-04 comments, demonstrates that the draft ordinance would allow levels of heavy metals to accumulate in soil vastly exceeding those found in uncontaminated California agricultural soil. By using the limits in state & federal regulations for so-called "EQ" sewage sludge (as does the draft) to set limits on soil accumulation, the ordinance would allow soil concentrations to reach the same levels as that in permitted sewage sludge. E.g., Soil concentrations of Cadmium, Lead & Mercury would be allowed to be 108, 13 and 65 higher than in the cited soil.

Heavy Metal Concentrations in California Agricultural Soil and Limits in Draft Ordinance, State & Federal Regulations. Multiples by which Draft Cumulative Limits Exceed Concentrations Found in Uncontaminated Agricultural Soil (in mg/kg = ppm)

Heavy Metal	Soil (158)	Ord Cap (3)		Cum Cap (5)	
			X		**X**
Arsenic	3.5	41	**11.7**		
Cadmium	0.36	39	**108**	20.36	**56.6**
Chromium	122	1200	**9.8**	1622	13.3
Copper	28.7	1500	**52.3**	778.7	**27**
Lead	23.9	300	**12.6**	173.9	**7.28**
Mercury	0.26	17	**65.4**	8.26	**31.8**
Molybdenum	1.3	75	**57.7**		
Nickel	57	420	**7.4**	267	**4.7**
Selenium	0.058	36	**621**	50	863
Zinc	149	2800	**18.8**	1549	**10.4**

Soil (158) = Data base utilized by California Department of Food & Agriculture in fertilizer risk assessments, identifying the maximum & minimum, lower & upper quartile, average & mean concentrations of 46 heavy metals in uncontaminated California agricultural soils (table displays average concentrations): "Background Concentrations of Trace and Major Elements in California Soils" Kearney Foundation Special Report, March 1996. Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California. G.R. Bradford (1), A.C. Chang (1), A.L. Page (1), D. Bakhtar (1), J.A. Frampton (2), and H. Wright (1). (1) Department of Soil and Environmental Sciences, University of California, Riverside. (2) Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, Ca.

3. Ord Cap = Draft Ordinance limits on heavy metal concentrations: The draft ordinance uses the same heavy metal limits it sets on so-called "EQ" sewage sludge and composted sewage sludge to set limits on heavy metal soil accumulation.
5. Cum Cap = Cumulative Cap on heavy metal soil accumulation: Soil concentrations resulting from land applying the most contaminated sewage sludge (non-"EQ", prohibited by this draft) to the maximum legal extent under state and federal regulations.

X = Multiple by which heavy metal concentration exceeds the average occurring in uncontaminated California agricultural soils.

Additionally, using the so-called "EQ" sewage sludge limits as soil accumulation limits would allow higher soil concentrations than permitted under state & federal regulations. E.g., while state & federal regulations permit the

Cadmium level to reach 20.36 ppm, the draft would allow it to reach 39 ppm. For Lead, while state & federal regulations permit a maximum level of 173.9 ppm, the draft would allow it to reach 300 ppm. For Mercury, while state & federal regulations permit a maximum level of 8.26 ppm, the draft would allow it to reach 17 ppm. The legality of setting soil accumulation limits in excess of those allowed under state & federal regulations may be in question.

RANGE of CONTAMINANT LIMITS in SEWAGE SLUDGE & SOIL

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATION …

San Luis Obispo County should incorporate into an ordinance a comprehensive set of constituents including heavy metals, synthetic chemicals, pathogens and other pollutants not limited to those in current state and federal standards, for setting sewage sludge quality and land accumulation limits.

Parameters used in Sewage Sludge & Soil Quality Standards

Conclusions - Wrong Ordinance being drafted

This draft ordinance conflicts with Board of Supervisors direction re: the set of parameters used for determining sewage sludge & soil quality.

This draft ordinance does not employ a range of parameters for setting limits on sewage sludge & soil contamination wider than those in federal & state regulations.

The set of contaminants used in this ordinance to limit sewage sludge & soil pollution is identical to that used in federal & state regulations.

An ordinance restricted to this narrow set of parameters is indefensible in light of current information, the range of contaminants used in other land application regulations, the number of contaminants erroneously exempted from regulation, and the number of contaminants recommended for regulatory consideration.

A range of contaminants wider than used in federal & state regulations for setting limits on sewage sludge & soil pollution is necessary to provide minimal protection of the public & environment.

Information about those contaminants potentially included in sewage sludge & soil pollution limits is readily available to the EHD.

Recommendations for Correct Ordinance

The EHD should draft an ordinance complying with Board of Supervisors direction re: the range of contaminants used to limit sewage sludge & soil pollution.

SLO County should reject reliance on the narrow set of pollutants used in federal & state regulations to limit sewage sludge & soil contamination, and expand the range of heavy metals, synthetic chemicals, pathogens and other contaminants used to set those limits.

The EHD should draft an ordinance incorporating contaminants into its sewage sludge & soil pollution limits that are currently regulated by other land

application practitioners and were erroneously exempted from federal & state regulatory limits, and should consider including those contaminants recommended for regulatory assessment and limitation.

- **Correct Ordinance – Wider Set of Sludge & Soil Quality Parameters**

Numerous elements, heavy metals, compounds, synthetic chemicals and pathogens outside the set of parameters used in federal & state sewage sludge & soil pollution limits are already regulated, identified as having been inappropriately excluded from regulations, or recommended for inclusion in regulatory consideration. This section of comments will not include excerpts from the various scientific reviews regarding erroneous regulatory exclusions or recommended regulatory inclusions, or cite each of the regulations including a wider range of contaminants. Rather, this section will only list those contaminants, or groups of thereof, that fall into those categories. (References citing each of the entries on this list are available from CSI.) This list is not exhaustive, but is illustrative of the range of contaminants that could be used to set limits on sewage sludge & soil pollution in the ordinance being drafted. It should be noted that all practitioners of land application use the nine heavy metals included in 503-based regulations to set limits on sewage sludge & soil contamination, and that the lists included in the tables below include only extra-503 contaminants.

Contaminants Regulated by Other Land Application Practitioners

The table below displays some of the contaminants, additional to those in federal & state regulations, being used by other land application practitioners to set limits on sewage sludge & soil pollution (listed with heavy metals first, synthetic chemicals second & pathogens last).

Contaminants Regulated by Other Land Application Practitioners
Cobalt, PCBs (polychlorinated biphenyls), Dioxins (PCDD - polychlorodibenzodioxins), APE (alkyl phenol ethoxylates), NPE (nonylphenol and nonylphenolethoxylates), Furans (PCDF - polychlorodibenzofurans), PAH (polyaromatic hydrocarbons - acenapthene, phenanthrene, fluorene, flouranthene, pyrene, benzo(b+j+k)fluoranthene, benzo(a)pyrene, benzo(ghi)perylene, indeno(1,2,3-c,d)pyrene), AOX (organohalogenous compounds), DEHP (di(2-ethylhexyl)phthalate), LAS (linear alkyl-benezene sulfonates), Toluene, Enterovirus, Enterobacteria.

ALTERNATIVES ANALYSIS

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATIONS

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts.

Over 14 years, CSI has repeatedly submitted comments on the failure of the County to implement this direction, in response to previous iterations of proposed permanent sewage sludge land application ordinances. Recipients of these comment letters include: the BofS, EHD, Planning Department and Commission, Agriculture Liaison Advisory Board, Agricultural Commissioner, Health Commission, Health Officer, and Water Resources Advisory Committee.

Included below are excerpts from two comment letters submitted in 2008 and 2003, which cite CSI's 2001 recommendation to conduct such an analysis.

2008 CSI Comment Letter:

to: Environmental Health Division (EHD) of SLO County Health Department
re: Draft Ordinance regulating Sewage Sludge Land Application issued 7-25-08
date: 11-3-08
cc: SLO Co. Board of Supervisors (BofS), Planning Commission, Planning Department Environmental Division, Agriculture Liaison Advisory Board, Agricultural Commissioner, Health Commission, Health Officer, Water Resources Advisory Committee.

…

1. Draft is Premature – No Alternatives or Impacts Analysis

No alternative means of managing sewage sludge, other than land application, have been analyzed. This fails to comply with Direction #6, cited below, in which the BofS directed EHD to conduct such an analysis, including all viable management methods and a comparison of their effects, as it formulated a permanent ordinance. Before the BofS issued that direction, the Planning Commission advised the BofS to conduct that analysis prior to committing resources to devising an ordinance authorizing the land application means of sewage sludge disposition. That direction and advice are below (emphasis added).

PRIMARY RECOMMENDATION…

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts. (2)

In its 11-28-01 comments, CSI submitted twelve recommendations regarding implementation of the SSLATF recommendations, the first of which was conducting such an analysis of alternatives prior to developing an ordinance permissive of land application:

"CSI Recommendation #1: Analysis of Sewage Sludge Management Alternatives

The Board of Supervisors should commission an analysis of all available methods of sewage sludge use &/or disposal to identify, evaluate & compare their potential economic, health & ecological risks & benefits.

This analysis should precede any commitment of any county resources or policy toward any management method, including the land application

alternative." (7)

In its 12-9-03 comments regarding the procedural aspects of permanent ordinance development, CSI devoted six pages to the failure to analyze alternatives and their relative impacts (under "Analysis of Alternatives to Sewage Sludge Land Application Absent" beginning on page 6 (4)). CSI cited federal legal authority for such discretionary power, the Agriculture & Open Space Element, BofS direction, Planning Commission and SSLATF recommendations, and the recommendations of a number of local organizations submitted to the BofS advocating such an analysis prior to the development of an ordinance permitting sewage sludge land application, including the Sierra Club, ECOSLO, SLO Coast Alliance, Friends of the RanchLand, SLO Cancer Action Now, Life On Planet Earth and Central Coast Peace and Environmental Council.

Additionally, in those 2003 comments, CSI cited two prior CSI submissions to the BofS and SSLATF regarding economically and environmentally feasible alternatives to sewage sludge land application. The first, dated 4-6-01, demonstrated five distinct advantages to landfilling sewage sludge over land applying it (5). The second, dated 3-5-02, demonstrated the existence of two dozen ways in which sewage sludge is used profitably to produce methane, ethanol, hydrogen, fuel oil & pellets, heat, electricity, and construction materials (6).

The science, technology and economics of the uses of sewage sludge alternative to land application have advanced significantly in the years since the BofS and EHD received advice to conduct an analysis of those methods and their relative effects prior to committing County resources toward drafting an ordinance permissive of sewage sludge land application.

<u>2003 CSI Comment Letter:</u>

to: Environmental Health Division (EHD) 12-10-03
SLO Co. Public Health Department
Attn: Rich Lichtenfels, REHS

re: SLO Co. Ordinance Regulating the Land Application of Treated Sewage Sludge/Biosolids
(9-23-03 Draft made available for comment through 1-30-04)

- **Procedural/Developmental Aspects of Ordinance Processing**

…

- **Analysis of Alternatives to Sewage Sludge Land Application Absent**

No analysis of methods of sewage sludge management other than land application has been conducted by any task force, advisory body or agency in SLO County. The LATF was explicitly directed by the EHD to formulate recommendations for an ordinance permissive of land application, and to exclude any comparative analysis of alternatives from its deliberations. Neither did the prior Health Commission Task Force analyze any alternative to land application. Thus, two successive years of multidisciplinary work by these two bodies have been devoted exclusively to examining the implications of, and formulating

guidance regarding, one management method only. To proceed toward approval of, or investment in, any particular alternative under these circumstances would not only be premature and illogical, but it would also be in conflict with County policy, be contrary to recommendations received from the Planning Commission and various local organizations & individuals, and be negligent of information the County has received regarding economically & technically viable and potentially preferable methods of use & management. It would also leave a primary LATF recommendation unfulfilled.

…

All of these recommendations were submitted to the Board of Supervisors prior to its 3-12-02 hearing on the 10-26-01 LATF Report & Recommendations. Regardless, the Board voted to direct staff to draft an ordinance permitting land application without examining any alternatives.

…

Information submitted to SLO Co. re: viable & preferable alternatives to land application

CSI submitted two papers to the SLO Co. Board of Supervisors and LATF analyzing a range of alternatives to sewage sludge land application. These papers demonstrated that there are economically & technically viable methods of sewage sludge management other than land application, and that a number of them may be preferable to land application from environmental, public health and agricultural productivity & marketing perspectives. These papers were submitted in advance of the Board's 3-12-02 vote to direct staff to draft an ordinance permitting land application.

…

Alternatives Analysis Required & Cheaper Prior to & Outside Scope of CEQA-based EIR

A comparative analysis of sewage sludge management alternatives prior to the drafting of a permissive ordinance is preferable to an analysis of a proposed ordinance pursuant to CEQA (California Environmental Quality Act) requirements. This is because it would be less expensive and more comprehensive than a CEQA-based EIR review of a proposed ordinance. Whereas an EIR/CEQA analysis of alternatives to a proposed ordinance would be limited to assessing the direct and physical environmental impacts of the selected alternatives to that project, an analysis of alternatives conducted outside the parameters of CEQA could entail consequences other than environmental impacts.

…

The 12-2-03 Staff Report regarding the Interim Moratorium contains a section titled "Final Treated Sewage Sludge/Biosolids Ordinance" in which it is reported that:

> "It is anticipated that the final biosolids ordinance may require an Environmental Impact Report (EIR) and cost at least $100,000. The actual cost will not be known until a consultant can be selected. The Public Health Department budget cannot absorb the cost of the EIR and will need an augmentation from the General Fund to pay for it. It is also anticipated

that the EIR will take at least a year to complete."

This expense of taxpayer funds, county staff time and effort would be premature, wasteful and misdirected under current circumstances. CSI has previously demonstrated that a preliminary analysis of alternatives to sewage sludge land application has been performed without any cost to SLO County (see above section). This analysis included parameters outside those to which a CEQA- based EIR alternatives analysis would be limited, as should any comprehensive look at options available to and under the jurisdiction of SLO County.

PUBLIC NOTIFICATION AND PARTICIPATION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure adequate public & community notification of project proposals, including opportunities to comment regarding them.

The proposed draft ordinance includes the sections below:

8.13.180 Appeals.

Any applicant aggrieved by the refusal of the Department to issue a permit or by the terms of a permit, may appeal the action to the County Health Officer by filing a written notice of appeal to the Department. The County Health Officer's decision can also be appealed to the Board of Supervisors. Such an appeal would be subject to the appeal procedures set forth by the Board of Supervisors. The Department will recover the costs of an appeal from the permit applicant.

8.13.090 Notification.

Notification of adjacent property owners is required at least fourteen (14) days prior to the scheduled land application. Notification shall be made in such a way that written proof is available documenting notification was made to adjacent property owners. Public notifications may be necessary depending on the location of the receiver site, such as signage alerting the public of scheduled land application.

Post land application access to receiver sites shall be limited to authorized personnel until biosolids material is incorporated into the soil.

Neither of these sections provide "public & community… opportunities to comment regarding" pending sewage sludge land application projects. Neither do they provide any means by which neighbors or the public may object to, or appeal, any pending decision regarding any permit. Additionally, they fail to

provide for means by which the public would be adequately informed of any pending land application projects.

The provision of a means by which applicants can appeal the denial (or the conditions) of a permit, while simultaneously denying neighbors and the general public of a means to appeal a decision to permit a pending land application project is a violation of this BofS direction. This draft ordinance, therefore, enables the spreading of sewage sludge at the expense of public notification and participation.

In its 11-3-08 comments on the proposed draft permanent ordinance issued on 7-25-08, CSI wrote:

5. Draft includes No Public or Landowner Notification or Consent

This draft ordinance includes no procedure for providing members of the public advance notification of sewage sludge land application proposals and the ability to comment on them…

The absence of any provisions for notification of members of the public and community potentially interested in sewage sludge land application proposals and for the opportunity to comment on them (#7) is utterly unacceptable, without any justification and completely contrary to BofS direction…

This draft, however does provide for notification of nearby neighbors about a pending land application project, but no notification of the broader "public & community".

LAND OWNER NOTIFICATION & INFORMED CONSENT

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.

The proposed draft ordinance includes the section below:

8.13.090 Notification.

Notification of adjacent property owners is required at least fourteen (14) days prior to the scheduled land application. Notification shall be made in such a way that written proof is available documenting notification was made to adjacent property owners. Public notifications may be necessary depending on the location of the receiver site, such as signage alerting the public of scheduled land application.

The proposed draft contains no provisions for notifying owners of land upon which sewage sludge land application is proposed of the potential dangers and benefits of the activity, and fails to require the "prior informed consent" of landowners. This deficiency conflicts with BofS direction, leaves landowners exposed to degradation of soil quality and property values, and diminishes landowners' right to be adequately informed of the potential consequences.

CSI has submitted comments on this deficiency in prior iterations of proposed permanent ordinances for 14 years, as the excerpts below demonstrate.

In its 11-3-08 comments on the proposed draft permanent ordinance issued on 7-25-08, CSI wrote:

5. Draft includes No Public or Landowner Notification or Consent

This draft ordinance includes… no procedure for informing landowners about the potential deleterious and beneficial effects of sewage sludge usage or for obtaining their informed prior consent…

The failures to provide, however, landowners… (i.e., those most immediately and significantly effected by this activity) with accurate information regarding the possible consequences and to obtain prior landowner informed consent (#s 9 & 10) are the more egregious of these omissions.

In its 1-31-04 comments on the substantive aspects of the prior draft permanent ordinance, CSI devoted two pages to the landowner notification and consent provisions of Direction #9 (under "Informed Consent of Property Owner is Mandatory" beginning on page 47). CSI relied on the research and recommendations of the Calif. Farm Bureau Federation to substantiate the necessity of specific procedures for landowner notification and consent, and concluded "The absence of a specific & separate informed consent document in this draft ordinance unacceptably leaves property owners inadequately informed of potential consequences.".

CSI's recommendation is below (<u>emphasis</u> added).

> "SLO County should draft an ordinance including a <u>formal prior consent document</u> fully informing property owners of the <u>potential adverse consequences</u> of sewage sludge land application." (8)

In its 11-28-01 comments, CSI explicitly supported Directions #9 & 10:

"CSI Recommendation #9: Public, Consumer & Landowner Information, Involvement & Consent…

- specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.

CSI's 1-31-04 Comments:

Sole Liability & Consent Expose Property Owner to Unfair Risk

<u>Conclusions - Wrong Ordinance being drafted</u>

The absence of a formal informed consent document leaves property owners inadequately informed of potential consequences, and is in conflict with the direction of the Board of Supervisors.

Recommendations for Correct Ordinance

The EHD should draft an ordinance including a formal prior consent document fully informing property owners of the potential adverse consequences of sewage sludge land application, in compliance with Board of Supervisors direction.

PROPERTY RECORD DOCUMENTATION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure property records document any land application activity and the availability of information regarding that activity, so prospective land purchasers and appraisers may be fully informed.

The proposed draft ordinance includes a section titled:
8.13.110 Recordkeeping and Reporting.

Rather than insert the section here, it is sufficient to report that it includes no mention of property records, property record documentation, or the necessity to inform prospective landowners and appraisers of the fact sewage sludge had been applied to the subject land. This deficiency is in conflict with this BofS direction, and exposes potential landowners to significant risks. The omission of this protective measure is a violation of the right of land purchasers to know the amounts of the various sewage sludge contaminants deposited on the property.

Rather than citing previous CSI comments on this issue, this letter will simply include an excerpt below from Chapter 5 ("Recommendations") of a briefing book CSI presented to the BofS, the SSLATF and others in 1999. It is from the California Farm Bureau Federation, which sent an expert representative to SLO County Sewage Sludge Land Application Task Force meetings.

> "A means for tracking sewage sludge applications so that future owners/operators can find out whether sewage sludge previously were used on the property must be implemented. Future owners/operators may want to avoid property that has received sewage sludge applications, whether because of existing or future crop restrictions, effects on land values, organic farming requirements or health concerns and a current owner may be unwilling to disclose that sewage sludge were used on the property if the sale could be jeopardized. Hence, a system to track sewage sludge applications and a way of informing future owners/operators about this 'system' should be created now, and not left for future resolution." *

* Calif. Farm Bureau Federation comments, 5-29-98 re: Draft General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use in Agricultural, Silvicultural, Horticultural, & Land Reclamation Activities; Calif. State Water Resources Control Board.

CSI was informed, immediately after the 11-12-15 EIR Scoping meeting, by the County lead agency on drafting sewage sludge land application ordinances (Environmental Health Division of the Health Agency) that the intent was to include this property-record requirement in this draft ordinance. The EHD acknowledged that its omission is an error.

LANDOWNER LIABILITY PROTECTION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Fees and Financial Considerations

San Luis Obispo County should incorporate into an ordinance:

- requirements for project proponents to post performance bonds & obtain insurance coverage, including pollution liability, to recompense parties potentially impacted by related remediation and/or litigation.

The proposed draft ordinance includes the section below:

8.13.140 Liability.

The generator and preparer of the biosolids are liable for the material if its land application results in a public health or environmental problem. Landowners (including their lenders) and leaseholders who use biosolids beneficially as a fertilizer substitute or soil conditioner in accordance with the USEPA Part 503 regulations are protected from liability under Superfund legislation, as well as any enforcement action from USEPA under the Part 503 rule. Where the federal requirements are not followed, appliers of biosolids are vulnerable to enforcement actions and can be required to remediate any problems for which they are liable.

The receiver site landowner/leaseholder shall obtain assurances from the generator and preparer via official documentation that any biosolids being land applied are of the appropriate quality and have been sufficiently prepared and that the application procedures used meet the requirements of the federal, state and county land application regulations. Copies of this documentation will be provided to the Department as a condition of approval for permit issuance.

On a case-by-case basis, the Department may require pollution liability insurance be obtained by the property owner or leaseholder.

This section of the draft ordinance omits any reference to "project proponents" (sewage sludge generators, haulers and appliers) posting performance bonds &/or obtaining pollution liability insurance. There is no

explicit provision ensuring that landowners (parties) are entitled to protection from remediation &/or litigation costs. The only mention of pollution liability insurance is in reference to the EHD requiring it of the landowner, at the EHD's discretion. This appears to be non-compliant with BofS direction and leave landowners vulnerable to financial damages resulting from activities of other project participants.

In its 1-31-04 comments, CSI devoted five pages to this topic, primarily composed of excerpts from expert analysis regarding assignation of financial and legal responsibility stemming from sewage sludge land application. Below are some of them which provide guidelines for providing an equitable distribution of the financial and legal burdens. They are included in those comments under the section titled:

Sole Liability & Consent Expose Property Owner to Unfair Risk

From the US EPA:

"… one way for a project sponsor to overcome such reluctance is to offer to indemnify such participants for any liabilities they incur or damages they suffer themselves, as a result of their participation.

The project sponsor is ordinarily in the best position to assess the risks of the project. Thus, if it can satisfy itself that the risks are outweighed by the benefits, it can provide reassurance to other participants by voluntarily assuming those risks. The indemnity agreement should explicitly state if the sponsor is assuming liability for even those harms resulting from the negligence of other project participants, since such indemnity may be demanded as a condition of participation." [31]

31. EPA "Institutional Constraints & Public Acceptance Barriers to Utilization of Municipal Wastewater & Sludge for Land Reclamation & Biomass Production", U.S. EPA Office of Water Program Operations, Municipal Construction Division. EPA 430/9-81-013. 7-81.

From the California Farm Bureau Federation:

"No. 107

Sewage Sludge Disposal …

Farmers should protect themselves from risks by securing an indemnification and hold harmless agreement with sludge generator and others associated with the application, underwritten by an appropriate private or public insurer. … All liability for pollution caused by sludge, that was otherwise legally applied, shall be borne by the sludge generator." (176)

"Finally, CFBF recommends that all treatment facilities supplying sewage sludge for land application on agricultural properties be required to provide, in writing, a formal 'Indemnification/Hold Harmless' requirement. … Clearly, a direct link of responsibility between the treatment facility and farmer would resolve many of these concerns as well as simplifying the legal process in the event a farmer is injured and requires restitution. [26. b]

re: "…a formal "Indemnification/Hold Harmless" requirement. The reason for such a requirement is the concern that contractual relationships between treatment facilities and applicators may purport to limit the ability of an injured farmer to seek restitution from the responsible treatment facility, e.g., Class B sewage sludge mislabeled as Class A, etc. In many cases, applicators are paid to remove sewage sludge from a treatment facility under a contract limiting the treatment facility's liability only to the applicator, since the applicator now owns the sewage sludge. … There are problems with such an arrangement. First, it is unclear, if the above is indeed a typical arrangement, what rights the farmer has for full reimbursement of losses. Will the applicator reimburse all cleanup expenses, loss of crops (now and until cleanup is complete), loss of property value, other incidental expenses, etc.? Second, what if the applicator goes bankrupt or no longer operates in California, who will honor the contract with the farmer? Finally, why should the farmer be forced into this third party arrangement in the first place?" [26. b]

176. Farm Bureau Policies 2001, Ag Alert (official publication of the California Farm Bureau Federation), vol. 27, # 46, 12-27-00.

26. b Calif. Farm Bureau Federation comments, 5-29-98 re: Draft General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use in Agricultural, Silvicultural, Horticultural, & Land Reclamation Activities; Calif. State Water Resources Control Board.

From the National Academy of Sciences, National Research Council:

"After studying the issue, the Farm Credit Institutions of the Northeast (an organization of farm credit banks) determined that assurances may be needed to cover the economic risk. They proposed that farmers seeking their loans through mortgage financing should make sure that the POTW that provides them with sludge will indemnify them in the event of hazardous waste liabilities that result from application of the sludge." [38]

38. "Use of Reclaimed Water & Sludge in Food Crop Production", National Research Council, National Academy Press, 1996.

From Boston College:

"It is therefore, not surprising that Farm Credit Institutions, consisting of major farm lenders in the United States, have also raised concerns over the potential damage to farmer livelihood should properties be subjected to the potential liabilities discussed above. Naturally, lenders do not wish to be subject to joint and several liability, and wish to preserve land productivity and value. Under CERCLA, ownership alone triggers liability, even though the owner has not actually participated in generating or disposing of the substance. Lenders have been found liable for clean ups even if they did not acquire the property, but had the capacity to affect hazardous waste disposal decisions. … If, however, a lender becomes an owner by foreclosing and taking title to the property, or by conducting management activities at the site, he is potentially liable." [164]

164. "Unsafe Sewage Sludge or Beneficial Biosolids?: Liability, Planning, and

Management Issues Regarding the Land Application of Sewage Treatment Residuals", W. Goldfarb, U. Krogmann, C. Hopkins. Boston College Environmental Affairs Law Review, vol. 26, Summer #4, 1999.

CONCLUSION

CSI declares that the above constitutes evidence sufficient to demonstrate that this proposed draft ordinance fails to qualify for submission to the CEQA/EIR process, due to the fact that it fails to conform to the directions of the SLO County Board of Supervisors and recommendations of the SLO County Sewage Sludge Land Application Task Force. Furthermore, the facts that this failure encompasses a multiplicity of elements fundamental to the construction of such an ordinance, and is so extreme in those failures, it is incumbent on SLO County to cease the CEQA/EIR process and proceed with drafting an ordinance in conformity with the directions and recommendations developed over years of intense work by a wide range of community interests. Ignoring that work would be unconscionable.

David Broadwater
Center for Sludge Information

Item No. 15
Meeting Date: January 12, 2016
Presented by: Terre Dunivant
Rec'd prior to meeting & posted to web on: January 7, 2016

To: fmecham@co.slo.ca.us, bgibson@co.slo.ca.us, ahill@co.slo.ca.us, lcompton@co.slo.ca.us, darnold@co.slo.ca.us,
Cc: cr_board_clerk@co.slo.ca.us,
Bcc:
Subject: Sewage Sludge BackGround - BofS Agenda 1-12-16
From: David Broadwater <csi@thegrid.net> - Wednesday 01/06/2016 09:15 PM

3 attachments

1.7 Contents.pdf TSSBS LATF Report 10-26-01.pdf BofS-SSLATF Directs-Recs Ords 3-12-02-10-26-01.pdf

SLO Co. BofS,
re: 1-12-16 Agenda Item #15 - Sewage Sludge Management Options

I have read the Staff Report and its three attachments and intend to submit comments specific to Agenda Item #15. But, due to the significance of this potentially pivotal occasion, before that, I will submit some preliminary documents for inclusion into the record of this proceeding, a number of which you've already received (with which I hope you've become familiar). Please ensure that the Clerk files and posts them as comments received regarding the 1-12-16 Agenda Item #15.
I've read nothing in the Staff Report (including attachments) which would contradict the conclusion that the CEQA/EIR review of the current draft ordinance should be halted for the previously articulated reasons.
I commend you for the attention you're willing to devote to this matter. There are serious consequences of your decisions for our County's agricultural economy, environmental integrity and public health.
This email contains some background information to provide context and some guidance for your deliberations.
David Broadwater

Attachments:
1. Reminder - Sewage Sludge Contents - What is the material we're discussing? This is a list of the ingredients of sewage sludge known and suspected by peer-reviewed scientific analysis to cause adverse impacts (see the list of references).

2. BofS Directions on drafting an ordinance permissive of sewage sludge land application - an exact compilation of the Sewage Sludge Land Application Task Force recommendations adopted by the BofS on 3-12-02, composed by CSI.

3. Sewage Sludge Land Application Task Force "Report & Recommendations to SLO Co. Board of Supervisors" adopted as BofS direction on 3-12-02 - exact text.

Sewage Sludge Contents / Tip of Iceberg

Heavy Metals, Pathogens, Synthetic Chemicals, Hydrocarbons, Petrochemicals & Organochlorines, Pharmaceuticals, Steroids & Hormones.

This list of contents represents only the "tip of the iceberg" of toxics concentrated in sewage sludge. Federal and most state and local land application regulations limit concentrations of only nine heavy metals and one "indicator" pathogen in land applied sewage sludge (in **BOLD**).

Heavy Metals [1, 2]

Aluminum, Antimony, **ARSENIC**, Barium, Beryllium, Bismuth, Boron, Bromine, **CADMIUM**, Cerium, Cesium, Chromium, **COPPER**, Cobalt, Dysprosium, Erbium, Europium, Gadolinium, Germanium, Gold, Hafnium, Holmium, Iron, Lanthanum, Lutetium, **LEAD**, Magnesium, Manganese, **MERCURY**, **MOLYBDENUM**, **NICKEL**, Niobium, Palladium, Praseodymium, Rhodium, Rubidium, Ruthenium, Samarium, Scandium, **SELENIUM**, Silver, Strontium, Tantalum, Tellurium, Terbium, Thallium Thorium, Thulium, Tin, Titanium, Tungsten, Uranium, Vanadium, Yttrium, Ytterbium, **ZINC**

Pathogens [3, 4, 5, 11, 15]

Bacteria

FECAL COLIFORM, Salmonella (2,000 types), Shigella (4 spp.), E. coli 0157:H7, Staphylococcus aureus, Enteropathogenic E. coli, Yersinia enterocolitica, Campylobacter jejuni, Vibrio cholera, Leptospira, Listeria, Helicobacter, Mycobacteria, Aeromonas, Legionella, Burkholderia, Endotoxins, antibiotic resistant bacteria,

Viruses

Adenovirus, Astrovirus, Calcivirus, Coronavirus, Enterovirus (Poliovirus, Coxsackie A, Coxackie B, Echovirus, Enterovirus 68-72), Hepatitis A virus, Hepatitis E virus, Norwalk virus, Reovirus, Rotavirus

Protozoa

Cryptosporidium, Entamoeba histolytica, Giardia lamblia, Balantidium coli, Toxoplasma gondii

Helminths (Parasites)

Ascaris lumbicoides (roundworm), Ancylostoma duodenale (hookworm), Necator americanus (hookworm), Tainia saginata (tapeworm), Trichuris (whipworm), Toxocara (roundworm), Strongyloides (threadworm), Ascaris suum, Toxocara canis, Taenia solium, Hymenolepis nana

Fungi

Aspergillus fumigatus, Candida albicans, Cryptococcus neoformans, Epidermophyton spp., Trichophyton spp., Trichosporon spp., Phialophora spp.,

Prions (spongiform encephalopathy)

While Federal law and regulations limit none of contents below, they allow localities to set more restrictive limits on sewage sludge and soil contamination. Some states do so &/or permit precautionary local control, and others do neither.

Once spread on land, the contaminants above and below persist for centuries - to decades - to months affecting soil, water, plants, air, animals and people.

Unlike pesticides (distinct chemicals subject to specific analysis), sewage sludge is a very complex, variable and concentrated mixture of the vast multitude of unstudied and unregulated hazardous wastes dumped into sewer systems.

Synthetic Chemicals [2, 6, 7, 8, 9, 12, 16]

Dioxins & Furans

Dioxins, Octachlorodibenzo-P-Dioxin, 1,2,3,4,6,7,8-Heptachlorodibenzo-P-Dioxin, Octachlorodibenzo Furan, 1,2,3,4,6,7,8-Heptachlorodibenzo-Furan (71), 2,3,7,8-Tetrachlorodibenzo-Furan, 1,2,3,6,7,8-Hexachlorodibenzo-P-Dioxin, 1,2,3,4,7,8-Hexachlorodibenzo-Furan , 1,2,3,7,8,9- Hexachlorodibenzo-P-Dioxin, 1,2,3,6,7,8-Hexachlorodibenzo-Furan, 2,3,4,6,7,8- Hexachlorodibenzo-Furan, 1,2,3,4,7,8,9-Heptachlorodibenzo-Furan, 2,3,4,7,8-Pentachlorodibenzo-Furan, 1,2,3,4,7,8- Hexachlorodibenzo-P-Dioxin, 1,2,3,7,8- Pentachlorodibenzo-Furan, 1,2,3,7,8- Pentachlorodibenzo-P-Dioxin, 1,2,3,7,8,9- Hexachlorodibenzo-Furan, 2,3,7,8- Tetrachlorodibenzo-P-Dioxin, Polychlorinated Dibenzodioxin/Polychlorinated Dibenzofuran (PCDD/PCDF), Tetrahydrofuran, 2,4-D, 2,4,5-T, dioxin (TCDD),

"Organics" (carbon-based)

Acetone, Chloroform, Cyclohexanone, Bis(2-ethylhexyl) Phthalate, Bis(2-ethylhexyl) tetrabromophthalate, Di-n-undecyl phthalate, Alkyl benzyl Phthalate, Di-(2-Ethylhexyl) Phthalate (DEHP), Butyl Benzyl Phthalate, Toluene, 2-Propanone, Methylene Chloride, Hexanoic Acid, 2-Butanone, Methyl Ethyl Ketone, Alcohol Ethoxylate, Alkylphenolethoxylates, Phenol, Nonylphenol, 2,2'-methylenebis[4-methyl-6- nonyl-Phenol, p-Nonylphenol, 4,4'-butylidenebis[2-(1,1-dimethylethyl)-5-methyl-, 4-Methylphenol, Phenol, 4,4'-(1-methylethylidene)bis[2-(1,1-dimeth, Phenol, 4,4'-(1-methylethylidene)bis[2-(1,1-dimeth, 2,4-dicumylphenol, p-Dodecylphenol, 2,4,5-Trichlorophenol, N-Hexacosane, N-Tetracosane, N-Dodecane, N-Tetradecane, N-Triacontane, N-Eicosane, N-Hexadecane, N-Octacosane, Carbon Disulfide, N-Decane, N-Docosane, N-Octadecane, P-Cymene, Benzo(B)fluranthene, Fluoranthene, P-Chloroaniline, Pyrene, Tetrachloromethane, Trichlorofluoromethane, 2-Hexanone, 2-Methylnaphthalene, 4-Chloroaniline, Benzo(a)pyrene

Pesticides & Insecticides

Aldrin, Chlordane, Cyclohexane, Heptachlor, Endosulfan, Endosulfan-II, Lindane, Dieldrin, Endrin, DDT, DDD, DDE, 2,4,5-Trichlorophenoxyacetic Acid, Acetic Acid (2,4-Dichlorophenoxy), 2,4,5-Trichlorophenoxypropionic Acid, Pentachloronitrobenzene, Chlorobenzilate, Beta-BHC, Kepone, Mirex, Methoxychlor,

PCBs (PolyChlorinated Biphenyls)

PCB-1016, PCB-1221, PCB-1232, PCB-1242, PCB-1248, PCB-1254, PCB-1260

PBDEs (PolyBrominated Diphenyl Ethers)

BDE-28, BDE-47, BDE-66, BDE-85, BDE-99, BDE-100, BDE-138, BDE-153, BDE-154, BDE-183, BDE-209,

Hydrocarbons, Petrochemicals, Organochlorines [7, 8, 9, 10, 12, 16]

PCBs, PCT, PBB, PBT, Anthracene, Pentachlorophenol, Benzo(g,h,i)perylene, Benzene, Benzene, C14-C24-branched, Polyethylbenzene residue, Octane, Hexachlorobenzene, Ethylbenzene, Chlorinated Benzenes, Naphtha (petroleum), turpentine-oil, Hydrotreated kerosene, Hydrocarbon oils, Hydrocarbons, C10 and C12, Distillates (petroleum), Fuel oil, Creosols, P-Cresol, O-Cresol, 2-(2H-Benzotriazol-2-yl)-p-cresol, Hexachlorobutadiene, N-Nitrosodimethylamine, Toxaphene, Trichloroethane, Tetrachloroethane, Hexachloroethane, Carbon Tetrachloride, Dichloroethylene, Trichioroethylene, Tetrachloroethylene, Xylene,

Pharmaceuticals [2, 12, 16]

1,7-Dimethylxanthine, 4-Epianhydrochlortetracycline, 4-Epianhydrotetracycline, 4-Epichlortetracycline, 4-Epioxytetracycline, 4-Epitetracycline, Acetaminophen, Albuterol, Anhydrochlortetracycline, Anhydrotetracycline, Azithromycin, Caffeine, Carbadox, Carbamazepine, Cefotaxime, Chlortetracycline, Cimetidine, Ciprofloxacin, Clarithromycin, Clinafloxacin, Cloxacillin, Codeine, Cotinine, Dehydronifedipine, Demeclocycline, Digoxigenin, Digoxin, Diltiazem, Diphenhydramine, Doxycycline, Enrofloxacin, Erythromycin-Total, Flumequine, Fluoxetine, Gemfibrozil, Ibuprofen, Isochlortetracycline, Lincomycin, Lomefloxacin, Metformin, Miconazole, Minocycline, Naproxen, Norfloxacin, Norgestimate, Ofloxacin, Ormetoprim, Oxacillin, Oxolinic Acid, Oxytetracycline, Penicillin G, Penicillin V, Ranitidine, Roxithromycin, Sarafloxacin, Sulfachloropyridazine, Sulfadiazine, Sulfadimethoxine, Sulfamerazine, Sulfamethazine, Sulfamethizole, Sulfamethoxazole, Sulfanilamide, Sulfathiazole, Tetracycline, Thiabendazole, Triclocarban, Triclosan, Trimethoprim, Tylosin, Virginiamycin, Warfarin,

Steroids & Hormones [2,12, 16]

17 Alpha-Dihydroequilin, 17 Alpha-Estradiol, 17 Alpha-Ethinyl-Estradiol, 17 Beta-Estradiol, Androstenedione, Androsterone, Beta Stigmastanol, Campesterol, Cholestanol, Cholesterol, Coprostanol, Desmosterol, Epicoprostanol, Equilenin, Ergosterol, Estriol, Estrone, Ethinylestradiol, Norethindrone, Norgestrel, Progesterone, Stigmasterol, Sitostanol, Beta-Estradiol 3-Benzoate, Beta-Sitosterol, Equilin, Testosterone,

"Acceptable" levels of exposure to sewage sludge contaminants are based on obsolete and faulty scientific data and processes. In 2002 and 2010, the National Academy of Sciences and National Institutes of Health established those facts [13, 14].

The risk assessments upon which these levels are based neglected dietary impacts on children; multi-pathway exposure; synergistic impacts; infectious organism exposure; ecological, wildlife, food chain, soil microorganism & forest soil impacts; long-term heavy metal accumulation; and used a cancer risk safety factor 100 times less protective than used for air and water pollution.

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Compiled 12-27-10 by
CSI (Center for Sludge Information), Atascadero, Calif. csi@thegrid.net

San Luis Obispo County Treated Sewage Sludge / Biosolids Land Application Task Force
Report & Recommendations to SLO Co. Board of Supervisors
October 26, 2001

BACKGROUND

An application to apply treated sewage sludge or biosolids on a thousand acres near San Miguel led to public controversy and a determination by the Regional Water Quality Control Board (RWQCB), in May of 1998, to require an Environmental Impact Report (EIR) for the project. Although that project was withdrawn due to the EIR requirement, continued public concern regarding potential health effects and the lack of regulation within the County led the Health Commission to form a task force to study these issues. That initial task force met during 1998 and 1999, and produced the report, *"Biosolids: An Overview and Recommendations for Land Application in San Luis Obispo County."* Details of this history are contained in the Introduction to that previous task force report.

In part, this effort was responsive to policies in the Agriculture & Open Space Element of the County General Plan. Policy AGP13 b reads as follows:

> The county should carefully evaluate and work cooperatively with appropriate state and federal agencies, local organizations and land owners to determine whether and under what circumstances bio-solids are appropriate for land disposal.
>
> **Discussion:** The county should evaluate the issues associated with land applications of bio-solids (sludge). If it is determined that there are benefits to agriculture to allow such applications, guidelines should be prepared to specify how and where such materials may be applied. The county Agricultural Commissioner, Environmental Health Department and the Department of Planning and Building should work cooperatively with U.C. Cooperative Extension, the Regional Water Quality Control Board, waste generators, land owners, researchers and environmental organizations to carefully evaluate this issue to determine the appropriate actions to take.

A similar policy, OSP 16d, is contained in the Open Space portion of the Element:

> The county should carefully evaluate, in conjunction with state and federal agencies and local organizations, whether and under what circumstances bio-solids are appropriate for disposal on open space lands.

The work of the Health Commission task force described above was the first step in this effort, and resulted in recommendations from the task force, the Health Commission and the Agricultural Commissioner's office to develop a County-based program to ensure local control and oversight of biosolids management and disposition.

On February 8, 2000, the Board of Supervisors considered seven options or approaches to regulating the land application of treated sewage sludge/biosolids. The options ranged from no regulatory action by the County, to a complete ban on land application. The Board shortened the list of options by deleting three, and then directed staff of the Environmental Health Division to proceed with the next phase in developing a local ordinance to address the matter. In providing this direction, three essential charges were given to staff and the Task Force:

First, the Environmental Health Division was to convene a public working group or Task Force to review and make recommendations from the narrowed list of policy choices for a local ordinance to control the land application of treated sewage sludge/biosolids. The four remaining options to be considered were:

1. Create a local ordinance based on federal and state regulations providing local control and oversight of how, when and where biosolids may be applied in San Luis Obispo County. A public education campaign as described … would be implemented concurrently. [The education campaign would focus on the nature of biosolids production, the public's (commercial and residential) ability to positively affect the quality of biosolids created, responsibility of safe production and disposal of biosolids material and the potential risks and benefits of biosolids land application.]

2. Create a local ordinance establishing more stringent requirements for quality of acceptable biosolids material, as well as local control and oversight of how, when and where biosolids may be applied. A public education campaign as described [above] would be implemented concurrently.
3. Create a local ordinance limiting biosolids land application to "exceptional quality" (EQ), the highest quality grade of biosolids as defined by existing federal regulations. Local measures for control and oversight would also be established, and a public education campaign as described … would be implemented concurrently.
4. Create an interim ban on biosolids land application while the workgroup conducts an evaluation to determine whether the ban should be lifted or remain in place. A public education campaign as described … would be implemented concurrently.

The second charge given to staff and the Task Force was to ensure the process incorporated diverse points of view. Recommendations to increase participation in the Task Force were adopted by the Board of Supervisors and funds were allocated for a consultant to help with the collaborative process. The product of the Task Force work was to reflect consideration of broad input from the community, affected land owners, technical specialists, environmental groups, and agencies involved in the management of treated sewage sludge/biosolids.

Third, several core issues to be considered in the deliberations were identified in the February 8, 2000 staff report. These formed the basis for discussions and recommendations regarding specific concerns to be addressed in the formulation of a local control ordinance.

Over the course of the last year, the Task Force met 20 times. With the presentation of this report and recommendations, all three of the above charges are fulfilled and guidance is provided for the next step in the process of developing a local ordinance for control of the land application of treated sewage sludge/biosolids in the County.

PRIMARY RECOMMENDATION

The primary recommendation of the Task Force is contained in the following motions, which were adopted over the course of several meetings by a majority of the Task Force members:

Identify Option No. 2 as the primary recommendation of the Task Force.
[Create a local ordinance establishing more stringent requirements for quality of acceptable biosolids material, as well as local control and oversight of how, when and where biosolids may be applied. A public education campaign as described [above] would be implemented concurrently.]

Local standards for sewage sludge quality shall be derived from but not limited to state and federal regulations.

San Luis Obispo County should adopt a sewage sludge land application ordinance using pollution accumulation limits, considering local soil pollutant levels.

San Luis Obispo County should incorporate into an ordinance a comprehensive set of constituents including heavy metals, synthetic chemicals, pathogens and other pollutants not limited to those in current state and federal standards, for setting sewage sludge quality and land accumulation limits.

The County should establish a limitation on accepting or processing new land application projects for treated sludge beyond historical amounts of EQ treated sewage sludge until completion of the local ordinance to control and regulate land application of treated sludge. (EQ is "exceptional quality" material, as defined in the federal regulations 40 CFR 503.)

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts.

ADDITIONAL RECOMMENDATIONS

The Task Force considered a series of more detailed motions dealing with some of the major issues and concerns that need to be addressed by the ordinance. Recommendations made by a majority of the Task Force members are summarized as follows:

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure adequate public & community notification of project proposals, including opportunities to comment regarding them.
- specific testing, written notification & reporting procedures to ensure consumers receive comprehensive information about treated sewage sludge/biosolids content, source, and usage guidelines.
- specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.
- specific procedures to ensure property records document any land application activity and the availability of information regarding that activity, so prospective land purchasers and appraisers may be fully informed.

Fees and Financial Considerations

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure that the fees imposed upon each project are sufficient to fund required assessment, monitoring & oversight activities.
- provisions for the assessment of fines and/or penalties in case of violations to effectively and rapidly enforce its regulations.
- requirements for project proponents to post performance bonds & obtain insurance coverage, including pollution liability, to recompense parties potentially impacted by related remediation and/or litigation.

General Use and Site Prohibitions

In preparing its ordinance, San Luis Obispo County should consider how, when, where, and whether treated sewage sludge/biosolids should be applied to:

a. Human Food-Chain Crops
b. Animal Feed Crops
c. Grazing, Pasture Land
d. Agricultural Soil Classifications
e. Home Gardens
f. Home Lawns
g. Public Parks
h. School Playgrounds
i. Sports Fields
j. Forests
k. Sensitive Ecological Areas & Species

Program and Project Requirements

In preparing its ordinance, San Luis Obispo County should consider provisions related but not limited to:

a. Transportation requirements
b. Buffer Zones / Set Back Distances
c. Water Supply Protection
d. Wind Speed Limits
e. Monitoring of heavy metals, pathogens, and other constituents.
f. Weather / Season
g. Incorporation into Soil
h. Runoff Protection
i. Erosion Control
j. Agronomic Rates
k. Crop Limitations
l. Type and frequency of application.

PUBLIC EDUCATION

On February 21, 2001, a public forum was held, which included presentations from three speakers with different roles and viewpoints regarding the land application of treated sewage sludge/biosolids. This event covered risks and benefits of land application, but did not address the other components identified as the focus for this effort. These other components include the responsibility for safe production and disposal of treated sewage sludge/biosolids and the public's ability to positively affect the quality of the material.

The public education campaign, as described in the February 8, 2000 staff report, should continue as part of the County's work in developing and implementing this ordinance. Additional funding to support this public education effort should be provided.

ALTERNATE VIEWPOINTS

Discussions by the Task Force were often extensive, and decisions were rarely unanimous. Early in the proceedings the Task Force decided to use a majority vote procedure to adopt recommendations, with the retention of minority vote counts and positions as a mechanism to transmit as much information from the meetings as possible. In the formulation of the Task Force recommendations, motions were made by members, discussed, and then decided by majority vote of the members present.

While effective, this approach became complex because there was not a consistent majority-minority split on issues. For example, after formulating the primary Task Force recommendations, some members objected to further consideration of more detailed issues believing that such matters should be addressed in the ordinance development. The majority, however, denied this objection, and voted to proceed with a detailed review of issues. The resulting work led to the Additional Recommendations described above.

On the other hand, there were a number of detailed suggestions, which were not supported by a majority of the Task Force. These included:

- a more restrictive interim prohibition against land application during the time period while the ordinance is being developed,
- more detailed procedures to ensure property owners have examined potential effects on their land value, credit, and insurance coverage,
- procedures for the County to establish indemnification or hold-harmless agreements between or among the entities involved in treated sewage sludge/biosolids land application,
- specification of the type of review that should be required under the California Environmental Quality Act (CEQA),
- prohibition of the land application of treated sewage sludge/biosolids,
- County-enforced independent testing of all materials and background conditions for which monitoring requirements are established, and for agronomic rate calculations.

Many specific recommendations were decided on close votes, and the majority was defined by the attitudes of Task Force members who were centrist in their positions. Thus, the full scope of the Task Force discussions was complex and reflected a variety of positions.

In the presentation of the motions (Attachment 2), a synopsis is provided for each discussion. More thorough notes of the discussions were prepared for each meeting, including qualifying language for some votes. These notes should be consulted for a more complete understanding of the various positions and concerns discussed.

NEXT STEPS

Based on the above recommendations, staff of the Environmental Health Division, with appropriate assistance from County Counsel and other departments, should draft the ordinance providing local control of the land application of treated sewage sludge/biosolids.

This process should include a review of feasible alternatives to land application, such as disposal through landfilling, incineration, or use in other products. The County Department of Planning and Building must be involved in this process to conduct the review required by the California Environmental Quality Act (CEQA) and to provide for the necessary public and agency input for consideration and adoption of the ordinance by the Board of Supervisors.

Additional research that may be helpful in this process, or which should be pursued to improve our understanding of the effects of land application, includes soil sampling and analysis at sites within the County where treated sewage sludge/biosolids have been applied in the past. Experimental test plots could also be established to study the effects of land application under controlled conditions. Cal Poly and the U.C. Agricultural Extension service could be instrumental in this work, and the County should support such research, as means are available.

EXPLANATION OF ATTACHMENTS

The remaining material in this report is organized into a series of attachments, which provide the support and documentation for the above recommendations. These attachments are as follows:

Attachment 1: Summary of Meetings, Membership and record of Meeting Attendance

This material provides a short summary of all of the Task Force meetings, and documents the participation of representatives with a variety of positions.

Attachment 2: Summary of All Motions Considered by the Task Force

All of the formal motions considered by the Task Force and the results of voting are listed in this attachment. Short summaries of the major points of discussion with each motion are provided. The detailed meeting notes, available from the Environmental Health Division, include the results of roll call votes and provide much more information. These notes should be reviewed for a more complete sense of the Task Force deliberations.

Attachment 3: List of Materials Distributed to the Task Force

In addition to previous staff reports and general literature, much of the information considered by the Task Force was prepared by its own members or specifically for this effort. The volume of material is much too large to include here, but all of the listed items are available from the Environmental Health Division.

SLO Co. BofS Directions & SSLATF Recommendations List *

Primary Recommendation = #s 1 – 6.

1. Identify Option No. 2 as the primary recommendation of the Task Force. [Create a local ordinance establishing more stringent requirements for quality of acceptable biosolids material, as well as local control and oversight of how, when and where biosolids may be applied. A public education campaign as described [above] would be implemented concurrently.]

2. Local standards for sewage sludge quality shall be derived from but not limited to state and federal regulations.

3. San Luis Obispo County should adopt a sewage sludge land application ordinance using pollution accumulation limits, considering local soil pollutant levels.

4. San Luis Obispo County should incorporate into an ordinance a comprehensive set of constituents including heavy metals, synthetic chemicals, pathogens and other pollutants not limited to those in current state and federal standards, for setting sewage sludge quality and land accumulation limits.

5. The County should establish a limitation on accepting or processing new land application projects for treated sludge beyond historical amounts of EQ treated sewage sludge until completion of the local ordinance to control and regulate land application of treated sludge. (EQ is "exceptional quality" material, as defined in the federal regulations 40 CFR 503.)

6. In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts.

Notification and Public Information - San Luis Obispo County should incorporate into an ordinance:

7. specific procedures to ensure adequate public & community notification of project proposals, including opportunities to comment regarding them.
8. specific testing, written notification & reporting procedures to ensure consumers receive comprehensive information about treated sewage sludge/biosolids content, source, and usage guidelines.
9. specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.
10. specific procedures to ensure property records document any land application activity and the availability of information regarding that activity, so prospective land purchasers and appraisers may be fully informed.

Fees and Financial Considerations - San Luis Obispo County should incorporate into an ordinance:

11. specific procedures to ensure that the fees imposed upon each project are sufficient to fund required assessment, monitoring & oversight activities.
12. provisions for the assessment of fines and/or penalties in case of violations to effectively and rapidly enforce its regulations.
13. requirements for project proponents to post performance bonds & obtain insurance coverage, including pollution liability, to recompense parties potentially impacted by related remediation and/or litigation.
14. General Use and Site Prohibitions - In preparing its ordinance, San Luis Obispo County should consider how, when, where, and whether treated sewage sludge/biosolids should be applied to:
    a. Human Food-Chain Crops
    b. Animal Feed Crops
    c. Grazing, Pasture Land
    d. Agricultural Soil Classifications
    e. Home Gardens
    f. Home Lawns
    g. Public Parks
    h. School Playgrounds
    i. Sports Fields
    j. Forests
    k. Sensitive Ecological Areas & Species
15. Program and Project Requirements - In preparing its ordinance, San Luis Obispo County should consider provisions related but not limited to:
    a. Transportation requirements
    b. Buffer Zones / Set Back Distances
    c. Water Supply Protection
    d. Wind Speed Limits
    e. Monitoring of heavy metals, pathogens, and other constituents.
    f. Weather / Season
    g. Incorporation into Soil
    h. Runoff Protection
    i. Erosion Control
    j. Agronomic Rates
    k. Crop Limitations
    l. Type and frequency of application.

* On 3-12-02 the SLO Co. BofS directed drafting of an ordinance based on San Luis Obispo County Treated Sewage Sludge / Biosolids Land Application Task Force Report & Recommendations to SLO Co. Board of Supervisors, 10-26-01.

To: fmecham@co.slo.ca.us, bgibson@co.slo.ca.us, ahill@co.slo.ca.us, lcompton@co.slo.ca.us, darnold@co.slo.ca.us,
Cc: cr_board_clerk@co.slo.ca.us,
Bcc:
Subject: Sewage Sludge - Cease EIR / Examine Options
From: David Broadwater <csi@thegrid.net> - Thursday 01/07/2016 02:01 PM

1 attachment

Wrong Ord. - BofS Directs - Stop EIR 12-18-15.pdf

SLO Co. BofS,
re: 1-12-16 Agenda Item #15 - Sewage Sludge Management Options

The purpose of this email is to place my 11-19-15 letter calling for the cessation of the CEQA/EIR review of the current draft permanent ordinance into the record of the 1-12-16 BofS meeting. An examination of the 1-12-16 Staff Report and attachments reveals that this letter is just as germane and to the point as when it was written and subsequently shred with you.
Please ensure that it is entered into the 1-12-16 record as correspondence received.
My next, and last, submission will specifically focus on the 1-12-16 Staff Report and attachments. It will refer to this letter and also call for stopping the CEQA/EIR review until: 1. a comprehensive evaluation of all feasible methods of sewage sludge management has been completed, & 2. if the County eventually selects land application as its preferred disposal/use method, a draft ordinance is constructed that complies with BofS directions.
David Broadwater

CSI: Center for Sludge Information
Advocacy through Acquisition, Analysis and Articulation of Information re:
Land Application of Sewage Sludge
6604 Portola Rd., Atascadero, Calif. 93422. ph# (805) 466-0352. Email: csi@thegrid.net

to: SLO County Planning & Building Department and Environmental Division

re: Proposed Permanent Sewage Sludge Land Application Ordinance
- **Wrong Ordinance – Fails to Conform with Board of Supervisors Directions & Task Force Recommendations**
- **Cease CEQA-EIR Process / Submit Correct Ordinance for Review**

date: 11-19-15

On 11-2-15, the SLO Co. Planning Department issued a Notice of Preparation regarding the initiation of the CEQA/EIR process on a draft permanent ordinance regulating and permitting the land application of sewage sludge. It initiated a Scoping Period ending on 12-18-15 to allow organizations, agencies and the public to submit recommendations regarding issues to be analyzed in the EIR.

This draft ordinance fails to comply with numerous BofS directions regarding how to construct such an ordinance. These failures undermine the very foundation of the ordinance, which are central to all sewage sludge land application regulations:
- The levels of contaminants allowed in land applied sewage sludge,
- The levels of contaminants allowed to accumulate in soil, and
- The range of contaminants used to limit the levels of contaminants in both sewage sludge and soil.

These are the core matters that determine the short- and long-range impacts of this activity on public health, ecological integrity and agricultural viability.

Additionally, this draft ordinance fails to comply with other important BofS directions designed to ensure that:
- SLO County doesn't blindly forge ahead with land application as the preferred means of sewage sludge disposal without analyzing other methods of disposal or use,
- The public is notified of pending land application projects and provided the opportunity to comment on them,
- Landowners are informed of the potential dangers and benefits of land application, and provide informed consent prior to receiving the material on their property,
- County property records document the depositing of any sewage sludge to inform potential buyers and appraisers of that activity prior to sale,
- Those generating and applying sewage sludge post performance bonds and obtain pollution liability insurance to protect landowners from remediation and litigation costs.

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These failures to follow BofS directions on formulating such an ordinance render this draft ordinance unqualified for submission to the CEQA/EIR process.

Although previous iterations of permanent ordinances have contained most of these deficiencies (about which CSI has repeatedly submitted comments), this is the first version to be subjected to the CEQA/EIR process.

RECOMMENDATIONS:

1. Cease the CEQA/EIR processing of this draft ordinance,
2. Draft an ordinance compliant with BofS directions, and
3. Initiate the CEQA/EIR process when such an ordinance is formulated.

CSI is fully prepared and willing to participate in a CEQA/EIR process on a permanent ordinance regulating and permitting sewage sludge land application, but is strongly opposed to subjecting this draft to that process due to its failures to qualify as an ordinance conforming with BofS directions.

Due to the costs the County will incur processing this deficient draft, in terms of staff and agency time, taxpayer money spent hiring a consultant to write the EIR (est. $200,000), this represents a massive waste of financial resources. Considering all the environmental, agricultural and community organizations and individuals with historical interest in this issue, it also represents an immense and unnecessary burden on those most likely to be effected by this activity.

Background:

Following its receipt of the Health Commission's Task Force recommendations advocating local control over sewage sludge land application (seizing it from the Central Coast Regional Water Quality Control Board [CCRWQCB]) on 10-12-99, the BofS directed the Environmental Health Division (EHD) of the Public Health Agency, on 2-8-00, to convene another Task Force to formulate recommendations for an ordinance regulating the land application of sewage sludge.

The EHD convened a broad, multidisciplinary task force consisting of the Farm Bureau, two local sewage plant managers, a Cal Poly soil scientist, CSI, an Agriculture Commissioner representative, the Sierra Club, a sewage sludge composting company, the UC Cooperative Extension, a sewage sludge spreading company, the Air Pollution Control District, a Health Commission member, a CCRWQCB representative, a geologist, the Environmental Center of SLO, a microbiologist, two citizens-at-large, and the Planning Department. Experts from the California Farm Bureau Federation, Cornell University Waste Management Institute, US EPA, UC Riverside, and the State Water Resources Control Board attended meetings and presented their analyses. Representatives from three California counties informed the Task Force about their land application ordinances.

The EHD's Sewage Sludge Land Application Task Force (SSLATF) worked for more than a year (from 9-13-00 until 10-24-01), producing its final report on 10-26-01. Upon receipt of the SSLATF report, the BofS, on 3-12-02, voted to adopt

the report's recommendations as its own directions to staff on drafting an ordinance. Those BofS directions have not been altered since their initial issuance, and are, therefore, currently in effect.

Subsequently, the BofS adopted an Interim Moratorium ordinance allowing land application of historical amounts of sewage sludge, which has been repeatedly extended since 2004, and is currently in effect. This is consistent with BofS direction #7, i.e., to maintain the status quo as a permanent ordinance is being developed. The EHD reports that no permits have been sought or issued since its enactment. Therefore, this effective ban on sewage sludge land application has been the status quo for eleven years.

NONCOMPLIANCE with BofS DIRECTIONS & SSLATF RECOMMENDATIONS

As cited above, CSI has previously submitted comments on the nonconformity of prior iterations of draft permanent ordinances circulated by the EHD, none of which were submitted by the County for CEQA/EIR review. Therefore, rather than rewrite these analyses, excerpts from comments submitted on 1-31-04 regarding a draft issued on 9-23-03 are included herein.

Additionally, in order to shorten the length of this letter, but to further substantiate the fact that this draft ordinance is noncompliant with BofS direction in more detail, this letter will be accompanied by, and include by reference, those 1-31-04 CSI comments (60 pages including a two-page list of references establishing their validity).

SEWAGE SLUDGE CONTAMINANT LEVELS

BofS Direction / SSLATF Recommendation
(<u>emphasis</u> added)

PRIMARY RECOMMENDATION

Identify Option No. 2 as the primary recommendation of the Task Force.

[Create a local ordinance establishing <u>more stringent requirements for quality</u> of acceptable biosolids material….]

<u>Local standards for sewage sludge quality</u> shall be derived from but <u>not limited to</u> state and federal regulations."

Sewage Sludge Quality Standards

<u>Conclusions - Wrong Ordinance being drafted</u>

This draft ordinance conflicts with Board of Supervisors direction re: sewage sludge quality.

It does not set contaminant limits "more stringent" than federal & state regulations.

The contaminant limits used are identical to federal & state limits, which inadequately influence sewage sludge pollution, and permit excessive contamination.

SLO Co. has the authority to set lower limits, and access to the requisite data for doing so.

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Recommendations for Correct Ordinance

The EHD should draft an ordinance based on Option #2 as directed by the Board of Supervisors.

Contaminant limits should be set at levels lower than found in federal & state regulations.

SLO Co. should conduct a survey of sewage sludge generated in SLO Co. to determine the ranges of concentrations of contaminants, and base contaminant limits on the concentrations found.

The EHD should consider the contaminant limits proposed by CSI and utilize the process by which they were determined to establish permissive, restrictive & prohibitive limits.

The table below, adapted from those 1-31-04 comments, demonstrates that the draft ordinance would allow land application of sewage sludge much more contaminated than that generated locally, e.g., 7 times, more than 3 times & nearly 5 times more Arsenic, Lead and Mercury, respectively.

Heavy Metal Concentrations in
Locally Generated Compost & Sewage Sludge.
Multiples by which Draft Ordinance Limits Exceed Concentrations Found in
Local Compost and Sewage Sludge
(in mg/kg = ppm)

Heavy Metal	MB Comp (1)	Co Sldg (2) ≤	Ord Cap (3)	**X Co Sldg**
Arsenic	2.6	5.9	41	**7**
Cadmium	3.7	3.9	39	**10**
Chromium	50.9	49	1200	**24.5**
Copper	451.9	890	1500	**1.7**
Lead	33	95	300	**3.2**
Mercury	0.27	3.9	17	**4.6**
Molybdenum	13.4	17	75	**4.4**
Nickel	32.1	58	420	**7.2**
Selenium	<5.5*	11.0	36	**3.3**
Zinc	1031	896	2800	**3.1**

1. MB Comp = Morro Bay Compost: "Exceptional Quality Biosolids Certification, City of Morro Bay–Cayucos Wastewater Treatment Plant, 10-29-08. 503 Metals Analysis Report, A & L Western Agricultural Laboratories, Inc., 9-10-08". Sheet distributed with composted sewage sludge at Morro Bay WWTP in March 2009.
2. Co Sldg = SLO County Sludge: High heavy metal concentrations in 73.5% - 88.9% of sewage sludge generated by two local sewage plants in SLO County in a five-year period (1997-2001) - equal to, or less than (≤), the mg/kg listed.
3. Ord Cap = Draft Ordinance Caps on heavy metal concentrations: The draft permanent ordinance sets sewage sludge heavy metal limits identical to these so-called "EQ" limits included in state and federal regulations.

Setting heavy metal limits at the concentrations found in locally generated

sewage sludge would allow roughly 80% of locally-generated sewage sludge to be land applied, which would incentivize sewage sludge producers to reduce the levels of these sewage sludge heavy metals (a primary purpose of such regulations), and prevent the land application of excessively contaminated sewage sludge.

The complete results and analysis of this local sewage sludge survey are included in Appendix A of CSI's 1-31-04 comments on the 9-23-03 draft ordinance ("Substantive/Structural Aspects of Ordinance Draft").

SOIL CONTAMINANT LEVELS

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATION …

San Luis Obispo County should adopt a sewage sludge land application ordinance using pollution accumulation limits, considering local soil pollutant levels.

Soil Quality Standards

Conclusions - Wrong Ordinance being drafted

This draft ordinance conflicts with Board of Supervisors direction re: soil quality.

It does not [set limits on additions of contaminants to soil (*)] or use local soil quality data in setting cumulative limits.

It relies by default on federal & state soil accumulation limits, which are based on faulty data & questionable assumptions, extremely controversial, inadequately protective, invalid, obsolete, irrelevant to local soil conditions, and permit excessive soil quality degradation.

SLO County has the authority and the means to implement more conservative approaches to cumulative limits which are valid & reliable and simple to develop & use.

The pollutant-balance & soil-based approaches to limiting the addition of contaminants to soil are superior means of preserving the long-term quality & utility of SLO County lands than the approach used in deriving federal & state limits.

Recommendations for Correct Ordinance

The EHD should draft an ordinance complying with Board of Supervisors direction re: soil quality.

The ordinance should set limits on the addition of contaminants to soil and incorporate data on local soil concentrations into those limits.

SLO County should conduct a survey of soils in the county to measure the concentrations of contaminants in uncontaminated background soils.

The EHD should draft an ordinance setting cumulative pollutant limits based on either the pollutant-balance or soil-based approach, or some combination thereof, using data from a local soil survey or data already available in a statewide soil analysis.

(*) This phrase is considered obsolete due to the fact that the current draft does contain limits on soil accumulation.

The table below, adapted from those 1-31-04 comments, demonstrates that the draft ordinance would allow levels of heavy metals to accumulate in soil vastly exceeding those found in uncontaminated California agricultural soil. By using the limits in state & federal regulations for so-called "EQ" sewage sludge (as does the draft) to set limits on soil accumulation, the ordinance would allow soil concentrations to reach the same levels as that in permitted sewage sludge. E.g., Soil concentrations of Cadmium, Lead & Mercury would be allowed to be 108, 13 and 65 higher than in the cited soil.

Heavy Metal Concentrations in California Agricultural Soil and Limits in Draft Ordinance, State & Federal Regulations. Multiples by which Draft Cumulative Limits Exceed Concentrations Found in Uncontaminated Agricultural Soil (in mg/kg = ppm)

Heavy Metal	Soil (158)	Ord Cap (3)		Cum Cap (5)	
			X		**X**
Arsenic	3.5	41	**11.7**		
Cadmium	0.36	39	**108**	20.36	**56.6**
Chromium	122	1200	**9.8**	1622	13.3
Copper	28.7	1500	**52.3**	778.7	**27**
Lead	23.9	300	**12.6**	173.9	**7.28**
Mercury	0.26	17	**65.4**	8.26	**31.8**
Molybdenum	1.3	75	**57.7**		
Nickel	57	420	**7.4**	267	**4.7**
Selenium	0.058	36	**621**	50	863
Zinc	149	2800	**18.8**	1549	**10.4**

Soil (158) = Data base utilized by California Department of Food & Agriculture in fertilizer risk assessments, identifying the maximum & minimum, lower & upper quartile, average & mean concentrations of 46 heavy metals in uncontaminated California agricultural soils (table displays average concentrations): "Background Concentrations of Trace and Major Elements in California Soils" Kearney Foundation Special Report, March 1996. Kearney Foundation of Soil Science, Division of Agriculture and Natural Resources, University of California. G.R. Bradford (1), A.C. Chang (1), A.L. Page (1), D. Bakhtar (1), J.A. Frampton (2), and H. Wright (1). (1) Department of Soil and Environmental Sciences, University of California, Riverside. (2) Department of Toxic Substances Control, California Environmental Protection Agency, Sacramento, Ca.

3. Ord Cap = Draft Ordinance limits on heavy metal concentrations: The draft ordinance uses the same heavy metal limits it sets on so-called "EQ" sewage sludge and composted sewage sludge to set limits on heavy metal soil accumulation.
5. Cum Cap = Cumulative Cap on heavy metal soil accumulation: Soil concentrations resulting from land applying the most contaminated sewage sludge (non-"EQ", prohibited by this draft) to the maximum legal extent under state and federal regulations.

X = Multiple by which heavy metal concentration exceeds the average occurring in uncontaminated California agricultural soils.

Additionally, using the so-called "EQ" sewage sludge limits as soil accumulation limits would allow higher soil concentrations than permitted under state & federal regulations. E.g., while state & federal regulations permit the

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Cadmium level to reach 20.36 ppm, the draft would allow it to reach 39 ppm. For Lead, while state & federal regulations permit a maximum level of 173.9 ppm, the draft would allow it to reach 300 ppm. For Mercury, while state & federal regulations permit a maximum level of 8.26 ppm, the draft would allow it to reach 17 ppm. The legality of setting soil accumulation limits in excess of those allowed under state & federal regulations may be in question.

RANGE of CONTAMINANT LIMITS in SEWAGE SLUDGE & SOIL

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATION …

San Luis Obispo County should incorporate into an ordinance a comprehensive set of constituents including heavy metals, synthetic chemicals, pathogens and other pollutants not limited to those in current state and federal standards, for setting sewage sludge quality and land accumulation limits.

Parameters used in Sewage Sludge & Soil Quality Standards

Conclusions - Wrong Ordinance being drafted

This draft ordinance conflicts with Board of Supervisors direction re: the set of parameters used for determining sewage sludge & soil quality.

This draft ordinance does not employ a range of parameters for setting limits on sewage sludge & soil contamination wider than those in federal & state regulations.

The set of contaminants used in this ordinance to limit sewage sludge & soil pollution is identical to that used in federal & state regulations.

An ordinance restricted to this narrow set of parameters is indefensible in light of current information, the range of contaminants used in other land application regulations, the number of contaminants erroneously exempted from regulation, and the number of contaminants recommended for regulatory consideration.

A range of contaminants wider than used in federal & state regulations for setting limits on sewage sludge & soil pollution is necessary to provide minimal protection of the public & environment.

Information about those contaminants potentially included in sewage sludge & soil pollution limits is readily available to the EHD.

Recommendations for Correct Ordinance

The EHD should draft an ordinance complying with Board of Supervisors direction re: the range of contaminants used to limit sewage sludge & soil pollution.

SLO County should reject reliance on the narrow set of pollutants used in federal & state regulations to limit sewage sludge & soil contamination, and expand the range of heavy metals, synthetic chemicals, pathogens and other contaminants used to set those limits.

The EHD should draft an ordinance incorporating contaminants into its sewage sludge & soil pollution limits that are currently regulated by other land

application practitioners and were erroneously exempted from federal & state regulatory limits, and should consider including those contaminants recommended for regulatory assessment and limitation.

- **Correct Ordinance – Wider Set of Sludge & Soil Quality Parameters**

Numerous elements, heavy metals, compounds, synthetic chemicals and pathogens outside the set of parameters used in federal & state sewage sludge & soil pollution limits are already regulated, identified as having been inappropriately excluded from regulations, or recommended for inclusion in regulatory consideration. This section of comments will not include excerpts from the various scientific reviews regarding erroneous regulatory exclusions or recommended regulatory inclusions, or cite each of the regulations including a wider range of contaminants. Rather, this section will only list those contaminants, or groups of thereof, that fall into those categories. (References citing each of the entries on this list are available from CSI.) This list is not exhaustive, but is illustrative of the range of contaminants that could be used to set limits on sewage sludge & soil pollution in the ordinance being drafted. It should be noted that all practitioners of land application use the nine heavy metals included in 503-based regulations to set limits on sewage sludge & soil contamination, and that the lists included in the tables below include only extra-503 contaminants.

Contaminants Regulated by Other Land Application Practitioners

The table below displays some of the contaminants, additional to those in federal & state regulations, being used by other land application practitioners to set limits on sewage sludge & soil pollution (listed with heavy metals first, synthetic chemicals second & pathogens last).

Contaminants Regulated by Other Land Application Practitioners
Cobalt, PCBs (polychlorinated biphenyls), Dioxins (PCDD - polychlorodibenzodioxins), APE (alkyl phenol ethoxylates), NPE (nonylphenol and nonylphenolethoxylates), Furans (PCDF - polychlorodibenzofurans), PAH (polyaromatic hydrocarbons - acenapthene, phenanthrene, fluorene, flouranthene, pyrene, benzo(b+j+k)fluoranthene, benzo(a)pyrene, benzo(ghi)perylene, indeno(1,2,3-c,d)pyrene), AOX (organohalogenous compounds), DEHP (di(2-ethylhexyl)phthalate), LAS (linear alkyl-benezene sulfonates), Toluene, Enterovirus, Enterobacteria.

ALTERNATIVES ANALYSIS

BofS Direction / SSLATF Recommendation

PRIMARY RECOMMENDATIONS

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts.

Over 14 years, CSI has repeatedly submitted comments on the failure of the County to implement this direction, in response to previous iterations of proposed permanent sewage sludge land application ordinances. Recipients of these comment letters include: the BofS, EHD, Planning Department and Commission, Agriculture Liaison Advisory Board, Agricultural Commissioner, Health Commission, Health Officer, and Water Resources Advisory Committee.

Included below are excerpts from two comment letters submitted in 2008 and 2003, which cite CSI's 2001 recommendation to conduct such an analysis.

2008 CSI Comment Letter:

to: Environmental Health Division (EHD) of SLO County Health Department
re: Draft Ordinance regulating Sewage Sludge Land Application issued 7-25-08
date: 11-3-08
cc: SLO Co. Board of Supervisors (BofS), Planning Commission, Planning Department Environmental Division, Agriculture Liaison Advisory Board, Agricultural Commissioner, Health Commission, Health Officer, Water Resources Advisory Committee.

…

1. Draft is Premature – No Alternatives or Impacts Analysis

No alternative means of managing sewage sludge, other than land application, have been analyzed. This fails to comply with Direction #6, cited below, in which the BofS directed EHD to conduct such an analysis, including all viable management methods and a comparison of their effects, as it formulated a permanent ordinance. Before the BofS issued that direction, the Planning Commission advised the BofS to conduct that analysis prior to committing resources to devising an ordinance authorizing the land application means of sewage sludge disposition. That direction and advice are below (emphasis added).

PRIMARY RECOMMENDATION…

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts. (2)

In its 11-28-01 comments, CSI submitted twelve recommendations regarding implementation of the SSLATF recommendations, the first of which was conducting such an analysis of alternatives prior to developing an ordinance permissive of land application:

"CSI Recommendation #1: Analysis of Sewage Sludge Management Alternatives

The Board of Supervisors should commission an analysis of all available methods of sewage sludge use &/or disposal to identify, evaluate & compare their potential economic, health & ecological risks & benefits.

This analysis should precede any commitment of any county resources or policy toward any management method, including the land application

alternative." (7)

In its 12-9-03 comments regarding the procedural aspects of permanent ordinance development, CSI devoted six pages to the failure to analyze alternatives and their relative impacts (under "Analysis of Alternatives to Sewage Sludge Land Application Absent" beginning on page 6 (4)). CSI cited federal legal authority for such discretionary power, the Agriculture & Open Space Element, BofS direction, Planning Commission and SSLATF recommendations, and the recommendations of a number of local organizations submitted to the BofS advocating such an analysis prior to the development of an ordinance permitting sewage sludge land application, including the Sierra Club, ECOSLO, SLO Coast Alliance, Friends of the RanchLand, SLO Cancer Action Now, Life On Planet Earth and Central Coast Peace and Environmental Council.

Additionally, in those 2003 comments, CSI cited two prior CSI submissions to the BofS and SSLATF regarding economically and environmentally feasible alternatives to sewage sludge land application. The first, dated 4-6-01, demonstrated five distinct advantages to landfilling sewage sludge over land applying it (5). The second, dated 3-5-02, demonstrated the existence of two dozen ways in which sewage sludge is used profitably to produce methane, ethanol, hydrogen, fuel oil & pellets, heat, electricity, and construction materials (6).

The science, technology and economics of the uses of sewage sludge alternative to land application have advanced significantly in the years since the BofS and EHD received advice to conduct an analysis of those methods and their relative effects prior to committing County resources toward drafting an ordinance permissive of sewage sludge land application.

<u>2003 CSI Comment Letter:</u>

to: Environmental Health Division (EHD) 12-10-03
SLO Co. Public Health Department
Attn: Rich Lichtenfels, REHS

re: SLO Co. Ordinance Regulating the Land Application of Treated Sewage Sludge/Biosolids
(9-23-03 Draft made available for comment through 1-30-04)

- **Procedural/Developmental Aspects of Ordinance Processing**

…

- **Analysis of Alternatives to Sewage Sludge Land Application Absent**

No analysis of methods of sewage sludge management other than land application has been conducted by any task force, advisory body or agency in SLO County. The LATF was explicitly directed by the EHD to formulate recommendations for an ordinance permissive of land application, and to exclude any comparative analysis of alternatives from its deliberations. Neither did the prior Health Commission Task Force analyze any alternative to land application. Thus, two successive years of multidisciplinary work by these two bodies have been devoted exclusively to examining the implications of, and formulating

guidance regarding, one management method only. To proceed toward approval of, or investment in, any particular alternative under these circumstances would not only be premature and illogical, but it would also be in conflict with County policy, be contrary to recommendations received from the Planning Commission and various local organizations & individuals, and be negligent of information the County has received regarding economically & technically viable and potentially preferable methods of use & management. It would also leave a primary LATF recommendation unfulfilled.

…

All of these recommendations were submitted to the Board of Supervisors prior to its 3-12-02 hearing on the 10-26-01 LATF Report & Recommendations. Regardless, the Board voted to direct staff to draft an ordinance permitting land application without examining any alternatives.

…

Information submitted to SLO Co. re: viable & preferable alternatives to land application

CSI submitted two papers to the SLO Co. Board of Supervisors and LATF analyzing a range of alternatives to sewage sludge land application. These papers demonstrated that there are economically & technically viable methods of sewage sludge management other than land application, and that a number of them may be preferable to land application from environmental, public health and agricultural productivity & marketing perspectives. These papers were submitted in advance of the Board's 3-12-02 vote to direct staff to draft an ordinance permitting land application.

…

Alternatives Analysis Required & Cheaper Prior to & Outside Scope of CEQA-based EIR

A comparative analysis of sewage sludge management alternatives prior to the drafting of a permissive ordinance is preferable to an analysis of a proposed ordinance pursuant to CEQA (California Environmental Quality Act) requirements. This is because it would be less expensive and more comprehensive than a CEQA-based EIR review of a proposed ordinance. Whereas an EIR/CEQA analysis of alternatives to a proposed ordinance would be limited to assessing the direct and physical environmental impacts of the selected alternatives to that project, an analysis of alternatives conducted outside the parameters of CEQA could entail consequences other than environmental impacts.

…

The 12-2-03 Staff Report regarding the Interim Moratorium contains a section titled "Final Treated Sewage Sludge/Biosolids Ordinance" in which it is reported that:

> "It is anticipated that the final biosolids ordinance may require an Environmental Impact Report (EIR) and cost at least $100,000. The actual cost will not be known until a consultant can be selected. The Public Health Department budget cannot absorb the cost of the EIR and will need an augmentation from the General Fund to pay for it. It is also anticipated

that the EIR will take at least a year to complete."

This expense of taxpayer funds, county staff time and effort would be premature, wasteful and misdirected under current circumstances. CSI has previously demonstrated that a preliminary analysis of alternatives to sewage sludge land application has been performed without any cost to SLO County (see above section). This analysis included parameters outside those to which a CEQA- based EIR alternatives analysis would be limited, as should any comprehensive look at options available to and under the jurisdiction of SLO County.

PUBLIC NOTIFICATION AND PARTICIPATION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure adequate public & community notification of project proposals, including opportunities to comment regarding them.

The proposed draft ordinance includes the sections below:

8.13.180 Appeals.

Any applicant aggrieved by the refusal of the Department to issue a permit or by the terms of a permit, may appeal the action to the County Health Officer by filing a written notice of appeal to the Department. The County Health Officer's decision can also be appealed to the Board of Supervisors. Such an appeal would be subject to the appeal procedures set forth by the Board of Supervisors. The Department will recover the costs of an appeal from the permit applicant.

8.13.090 Notification.

Notification of adjacent property owners is required at least fourteen (14) days prior to the scheduled land application. Notification shall be made in such a way that written proof is available documenting notification was made to adjacent property owners. Public notifications may be necessary depending on the location of the receiver site, such as signage alerting the public of scheduled land application.

Post land application access to receiver sites shall be limited to authorized personnel until biosolids material is incorporated into the soil.

Neither of these sections provide "public & community… opportunities to comment regarding" pending sewage sludge land application projects. Neither do they provide any means by which neighbors or the public may object to, or appeal, any pending decision regarding any permit. Additionally, they fail to

provide for means by which the public would be adequately informed of any pending land application projects.

The provision of a means by which applicants can appeal the denial (or the conditions) of a permit, while simultaneously denying neighbors and the general public of a means to appeal a decision to permit a pending land application project is a violation of this BofS direction. This draft ordinance, therefore, enables the spreading of sewage sludge at the expense of public notification and participation.

In its 11-3-08 comments on the proposed draft permanent ordinance issued on 7-25-08, CSI wrote:

5. Draft includes No Public or Landowner Notification or Consent

This draft ordinance includes no procedure for providing members of the public advance notification of sewage sludge land application proposals and the ability to comment on them…

The absence of any provisions for notification of members of the public and community potentially interested in sewage sludge land application proposals and for the opportunity to comment on them (#7) is utterly unacceptable, without any justification and completely contrary to BofS direction…

This draft, however does provide for notification of nearby neighbors about a pending land application project, but no notification of the broader "public & community".

LAND OWNER NOTIFICATION & INFORMED CONSENT

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.

The proposed draft ordinance includes the section below:

8.13.090 Notification.

Notification of adjacent property owners is required at least fourteen (14) days prior to the scheduled land application. Notification shall be made in such a way that written proof is available documenting notification was made to adjacent property owners. Public notifications may be necessary depending on the location of the receiver site, such as signage alerting the public of scheduled land application.

The proposed draft contains no provisions for notifying owners of land upon which sewage sludge land application is proposed of the potential dangers and benefits of the activity, and fails to require the "prior informed consent" of landowners. This deficiency conflicts with BofS direction, leaves landowners exposed to degradation of soil quality and property values, and diminishes landowners' right to be adequately informed of the potential consequences.

CSI has submitted comments on this deficiency in prior iterations of proposed permanent ordinances for 14 years, as the excerpts below demonstrate.

In its 11-3-08 comments on the proposed draft permanent ordinance issued on 7-25-08, CSI wrote:

5. Draft includes No Public or Landowner Notification or Consent

This draft ordinance includes… no procedure for informing landowners about the potential deleterious and beneficial effects of sewage sludge usage or for obtaining their informed prior consent…

The failures to provide, however, landowners… (i.e., those most immediately and significantly effected by this activity) with accurate information regarding the possible consequences and to obtain prior landowner informed consent (#s 9 & 10) are the more egregious of these omissions.

In its 1-31-04 comments on the substantive aspects of the prior draft permanent ordinance, CSI devoted two pages to the landowner notification and consent provisions of Direction #9 (under "Informed Consent of Property Owner is Mandatory" beginning on page 47). CSI relied on the research and recommendations of the Calif. Farm Bureau Federation to substantiate the necessity of specific procedures for landowner notification and consent, and concluded "The absence of a specific & separate informed consent document in this draft ordinance unacceptably leaves property owners inadequately informed of potential consequences.".

CSI's recommendation is below (<u>emphasis</u> added).

> "SLO County should draft an ordinance including a <u>formal prior consent document</u> fully informing property owners of the <u>potential adverse consequences</u> of sewage sludge land application." (8)

In its 11-28-01 comments, CSI explicitly supported Directions #9 & 10:

"CSI Recommendation #9: Public, Consumer & Landowner Information, Involvement & Consent…

- specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.

CSI's 1-31-04 Comments:

Sole Liability & Consent Expose Property Owner to Unfair Risk

<u>Conclusions - Wrong Ordinance being drafted</u>

The absence of a formal informed consent document leaves property owners inadequately informed of potential consequences, and is in conflict with the direction of the Board of Supervisors.

Recommendations for Correct Ordinance

The EHD should draft an ordinance including a formal prior consent document fully informing property owners of the potential adverse consequences of sewage sludge land application, in compliance with Board of Supervisors direction.

PROPERTY RECORD DOCUMENTATION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Notification and Public Information

San Luis Obispo County should incorporate into an ordinance:

- specific procedures to ensure property records document any land application activity and the availability of information regarding that activity, so prospective land purchasers and appraisers may be fully informed.

The proposed draft ordinance includes a section titled:

8.13.110 Recordkeeping and Reporting.

Rather than insert the section here, it is sufficient to report that it includes no mention of property records, property record documentation, or the necessity to inform prospective landowners and appraisers of the fact sewage sludge had been applied to the subject land. This deficiency is in conflict with this BofS direction, and exposes potential landowners to significant risks. The omission of this protective measure is a violation of the right of land purchasers to know the amounts of the various sewage sludge contaminants deposited on the property.

Rather than citing previous CSI comments on this issue, this letter will simply include an excerpt below from Chapter 5 ("Recommendations") of a briefing book CSI presented to the BofS, the SSLATF and others in 1999. It is from the California Farm Bureau Federation, which sent an expert representative to SLO County Sewage Sludge Land Application Task Force meetings.

> "A means for tracking sewage sludge applications so that future owners/operators can find out whether sewage sludge previously were used on the property must be implemented. Future owners/operators may want to avoid property that has received sewage sludge applications, whether because of existing or future crop restrictions, effects on land values, organic farming requirements or health concerns and a current owner may be unwilling to disclose that sewage sludge were used on the property if the sale could be jeopardized. Hence, a system to track sewage sludge applications and a way of informing future owners/operators about this 'system' should be created now, and not left for future resolution." *

* Calif. Farm Bureau Federation comments, 5-29-98 re: Draft General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use in Agricultural, Silvicultural, Horticultural, & Land Reclamation Activities; Calif. State Water Resources Control Board.

CSI was informed, immediately after the 11-12-15 EIR Scoping meeting, by the County lead agency on drafting sewage sludge land application ordinances (Environmental Health Division of the Health Agency) that the intent was to include this property-record requirement in this draft ordinance. The EHD acknowledged that its omission is an error.

LANDOWNER LIABILITY PROTECTION

BofS Direction / SSLATF Recommendation

ADDITIONAL RECOMMENDATIONS

Fees and Financial Considerations

San Luis Obispo County should incorporate into an ordinance:

- requirements for project proponents to post performance bonds & obtain insurance coverage, including pollution liability, to recompense parties potentially impacted by related remediation and/or litigation.

The proposed draft ordinance includes the section below:

8.13.140 Liability.

The generator and preparer of the biosolids are liable for the material if its land application results in a public health or environmental problem. Landowners (including their lenders) and leaseholders who use biosolids beneficially as a fertilizer substitute or soil conditioner in accordance with the USEPA Part 503 regulations are protected from liability under Superfund legislation, as well as any enforcement action from USEPA under the Part 503 rule. Where the federal requirements are not followed, appliers of biosolids are vulnerable to enforcement actions and can be required to remediate any problems for which they are liable.

The receiver site landowner/leaseholder shall obtain assurances from the generator and preparer via official documentation that any biosolids being land applied are of the appropriate quality and have been sufficiently prepared and that the application procedures used meet the requirements of the federal, state and county land application regulations. Copies of this documentation will be provided to the Department as a condition of approval for permit issuance.

On a case-by-case basis, the Department may require pollution liability insurance be obtained by the property owner or leaseholder.

This section of the draft ordinance omits any reference to "project proponents" (sewage sludge generators, haulers and appliers) posting performance bonds &/or obtaining pollution liability insurance. There is no

explicit provision ensuring that landowners (parties) are entitled to protection from remediation &/or litigation costs. The only mention of pollution liability insurance is in reference to the EHD requiring it of the landowner, at the EHD's discretion. This appears to be non-compliant with BofS direction and leave landowners vulnerable to financial damages resulting from activities of other project participants.

In its 1-31-04 comments, CSI devoted five pages to this topic, primarily composed of excerpts from expert analysis regarding assignation of financial and legal responsibility stemming from sewage sludge land application. Below are some of them which provide guidelines for providing an equitable distribution of the financial and legal burdens. They are included in those comments under the section titled:

Sole Liability & Consent Expose Property Owner to Unfair Risk

From the US EPA:

"… one way for a project sponsor to overcome such reluctance is to offer to indemnify such participants for any liabilities they incur or damages they suffer themselves, as a result of their participation.

The project sponsor is ordinarily in the best position to assess the risks of the project. Thus, if it can satisfy itself that the risks are outweighed by the benefits, it can provide reassurance to other participants by voluntarily assuming those risks. The indemnity agreement should explicitly state if the sponsor is assuming liability for even those harms resulting from the negligence of other project participants, since such indemnity may be demanded as a condition of participation." [31]

31. EPA "Institutional Constraints & Public Acceptance Barriers to Utilization of Municipal Wastewater & Sludge for Land Reclamation & Biomass Production", U.S. EPA Office of Water Program Operations, Municipal Construction Division. EPA 430/9-81-013. 7-81.

From the California Farm Bureau Federation:

"No. 107

Sewage Sludge Disposal …

Farmers should protect themselves from risks by securing an indemnification and hold harmless agreement with sludge generator and others associated with the application, underwritten by an appropriate private or public insurer. … All liability for pollution caused by sludge, that was otherwise legally applied, shall be borne by the sludge generator." (176)

"Finally, CFBF recommends that all treatment facilities supplying sewage sludge for land application on agricultural properties be required to provide, in writing, a formal 'Indemnification/Hold Harmless' requirement. … Clearly, a direct link of responsibility between the treatment facility and farmer would resolve many of these concerns as well as simplifying the legal process in the event a farmer is injured and requires restitution. [26. b]

re: "…a formal "Indemnification/Hold Harmless" requirement. The reason for such a requirement is the concern that contractual relationships between treatment facilities and applicators may purport to limit the ability of an injured farmer to seek restitution from the responsible treatment facility, e.g., Class B sewage sludge mislabeled as Class A, etc. In many cases, applicators are paid to remove sewage sludge from a treatment facility under a contract limiting the treatment facility's liability only to the applicator, since the applicator now owns the sewage sludge. … There are problems with such an arrangement. First, it is unclear, if the above is indeed a typical arrangement, what rights the farmer has for full reimbursement of losses. Will the applicator reimburse all cleanup expenses, loss of crops (now and until cleanup is complete), loss of property value, other incidental expenses, etc.? Second, what if the applicator goes bankrupt or no longer operates in California, who will honor the contract with the farmer? Finally, why should the farmer be forced into this third party arrangement in the first place?" [26. b]

176. Farm Bureau Policies 2001, Ag Alert (official publication of the California Farm Bureau Federation), vol. 27, # 46, 12-27-00.

26. b Calif. Farm Bureau Federation comments, 5-29-98 re: Draft General Waste Discharge Requirements for the Discharge of Biosolids to Land for Use in Agricultural, Silvicultural, Horticultural, & Land Reclamation Activities; Calif. State Water Resources Control Board.

From the National Academy of Sciences, National Research Council:

"After studying the issue, the Farm Credit Institutions of the Northeast (an organization of farm credit banks) determined that assurances may be needed to cover the economic risk. They proposed that farmers seeking their loans through mortgage financing should make sure that the POTW that provides them with sludge will indemnify them in the event of hazardous waste liabilities that result from application of the sludge." [38]

38. "Use of Reclaimed Water & Sludge in Food Crop Production", National Research Council, National Academy Press, 1996.

From Boston College:

"It is therefore, not surprising that Farm Credit Institutions, consisting of major farm lenders in the United States, have also raised concerns over the potential damage to farmer livelihood should properties be subjected to the potential liabilities discussed above. Naturally, lenders do not wish to be subject to joint and several liability, and wish to preserve land productivity and value. Under CERCLA, ownership alone triggers liability, even though the owner has not actually participated in generating or disposing of the substance. Lenders have been found liable for clean ups even if they did not acquire the property, but had the capacity to affect hazardous waste disposal decisions. … If, however, a lender becomes an owner by foreclosing and taking title to the property, or by conducting management activities at the site, he is potentially liable." [164]

164. "Unsafe Sewage Sludge or Beneficial Biosolids?: Liability, Planning, and

Management Issues Regarding the Land Application of Sewage Treatment Residuals", W. Goldfarb, U. Krogmann, C. Hopkins. Boston College Environmental Affairs Law Review, vol. 26, Summer #4, 1999.

CONCLUSION

CSI declares that the above constitutes evidence sufficient to demonstrate that this proposed draft ordinance fails to qualify for submission to the CEQA/EIR process, due to the fact that it fails to conform to the directions of the SLO County Board of Supervisors and recommendations of the SLO County Sewage Sludge Land Application Task Force. Furthermore, the facts that this failure encompasses a multiplicity of elements fundamental to the construction of such an ordinance, and is so extreme in those failures, it is incumbent on SLO County to cease the CEQA/EIR process and proceed with drafting an ordinance in conformity with the directions and recommendations developed over years of intense work by a wide range of community interests. Ignoring that work would be unconscionable.

David Broadwater
Center for Sludge Information

Item No. 15
Meeting Date: January 12, 2016
Presented by: David Broadwater
Rec'd prior to meeting & posted to web on: January 7, 2016

Hugh D. Loftus
1264 Saint Andrews Way
Nipomo, CA 93444

January 5, 2015

James A. Bergman, Director
Department of Planning and Building
County of San Luis Obispo
County Government Center
876 Osos Street, Room 200
San Luis Obispo, CA 93408

Re: Blacklake LLC November 24th request for Director's determination

Dear Director Bergman:

Your Department has received, although not yet accepted, a proposal from the Blacklake LLC for extensive development and changes to the Blacklake community. The hold letters issued in response to this application are extensive and reflective of the numerous and very serious issues that it addresses. However, there are additional factors that also require consideration that are not referenced in the initial response and which would argue against your taking the action suggested in the above referenced letter.

The preamble to the Blacklake Specific Plan (the Plan) cites CGC 66473.5,

> A proposed subdivision shall be consistent with a general plan or a specific plan **only if the local agency has officially adopted such a plan and the proposed subdivision or land use is compatible with the objectives, policies, general land uses and programs specified in such a plan.** (Emphasis added).

The changes being proposed are not consistent with the Plan and should require a full review and public hearings of the Planning Commission and the Board of Supervisors as called for in the California Government Code. Specifically, the intensity of the development, abandonment of significant portions of the Open Space and their related subdivision as delineated in the proposal are not on their surface compatible uses.

The Plan identifies the entire golf course as a Primary Recreation Area suitable for golf course and related use; residential units be they permanent or visitor serving, other than a caretakers unit, are not a permitted use. Only a secondary recreational area adjacent to the golf course allows for more extensive uses.

Figure 7 of the Plan specifically identifies the nine holes currently identified as the Oaks as places that were to be protected by a self renewing open space easement. While it appears that this easement was never recorded by the

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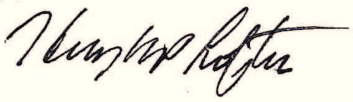
County, the intent is clear in the language and the provisions for appealing its continuation should be respected. Additionally, the Plan goal of preserving and enhancing the visual resources represented by the golf course and Blacklake Canyon is being significantly eroded in the proposal.

Finally, the Plan establishes a requirement that a letter of approval from the identified Architectural Review Committee (ARC) must accompany such an application before approval. This requirement is not made clear in the hold letters and should be as the developer has taken the questionable stance that the ARC must approve his proposal and he does not have an application for this proposal before them.

Thank you for your consideration.

Sincerely,



cc. Lynn Compton, 4th District Supervisor
Room D-430
County Government Center
San Luis Obispo, CA 93408